

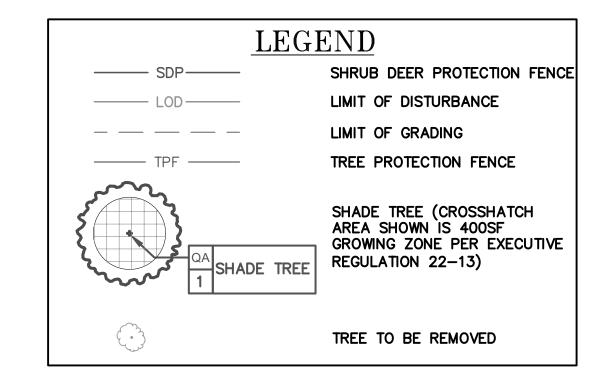
- 1. REFER TO SIGNING AND STRIPING PLAN FOR PAVEMENT MARKING DETAILS.
  2. CONTRACTOR SHALL FIELD ADJUST GRADING TO PROVIDE SMOOTH TRANSITIONS INTO EXISTING FEATURES AND PROMOTE SHEET FLOW WHERE POSSIBLE. ALL GRADING CHANGES TO BE PRE—APPROVED BY COUNTY INSPECTOR.
- 3. INSTALL SHRUB DEER PROTECTION DEVICES AS PER DETAIL. PROTECTION SHALL BE PROVIDED FOR EACH GROUP OF 4 SHRUBS, MAXIMUM.4. INSTALL TREE DEER PROTECTION DEVICES AS PER DETAIL.

5. UNLESS OTHERWISE SPECIFIED, ALL DISTURBED AREAS SHALL BE STABILIZED

- WITH: — 4" OF TOPSOIL
- TURFGRASS SEED MIX
  - 20% VIRGINIA WILD RYE20% RIPARIAN WILD RYE
  - 20% DEER TONGUE
  - 20% CREEPING RED FESCUE20% ANNUAL RYE
- MULCH
- 8. REFER TO PLAN SHEET LS-09 FOR SPECIFIC NOTES PERTAINING TO TREE PRESERVATION, INVASIVE SPECIES, INSPECTIONS, AND TREE CANOPY INFORMATION. 9. PLEASE SEE SHEET LS-07 FOR TREE PLANTING DETAIL.
- 10. PLEASE SEE SHEET LS-09 FOR STANDARD TREE CANOPY NOTES.

		LANDS	SCAPE PLANT	SCHEDULI	E	
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENTS
TREES *CO *QL	11	CELTIS OCCIDENTALIS QUERCUS LYRATA	COMMON HACKBERRY OVERCUP OAK	2.5" CAL.	B&B B&B	50' O.C., AS SHOWN 50' O.C., AS SHOWN

\*SHADE TREE TO FULFILL MONTGOMERY COUNTY TREE CANOPY REQUIREMENT.



				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND		
				REFER TO TITLE SHEET FOR SIG	GNATURES	
				Chief, Design Section  APPROVED	Date	
				REFER TO TITLE SHEET FOR SIG	SNATURES	
				Chief, Division of Transportation Engineering	Date	SC
NO.	REVISION	DATE	BY	Designed by: <u>SBD</u> Drawn by: <u>SBD</u>	Checked by: SJR	Proje

LS-01 LANDSCAPE PLAN

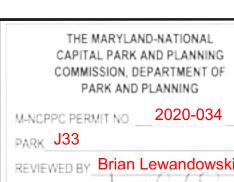
GOOD HOPE ROAD SHARED USE PATH

 0
 30'
 60'
 DATUM: NAD 83(2011) HORIZ NAVD 88 VERT

 SCALE: 1"=30'
 DATE: DECEMBER 2021

 Project No.: 501902
 SHEET 78 of 135





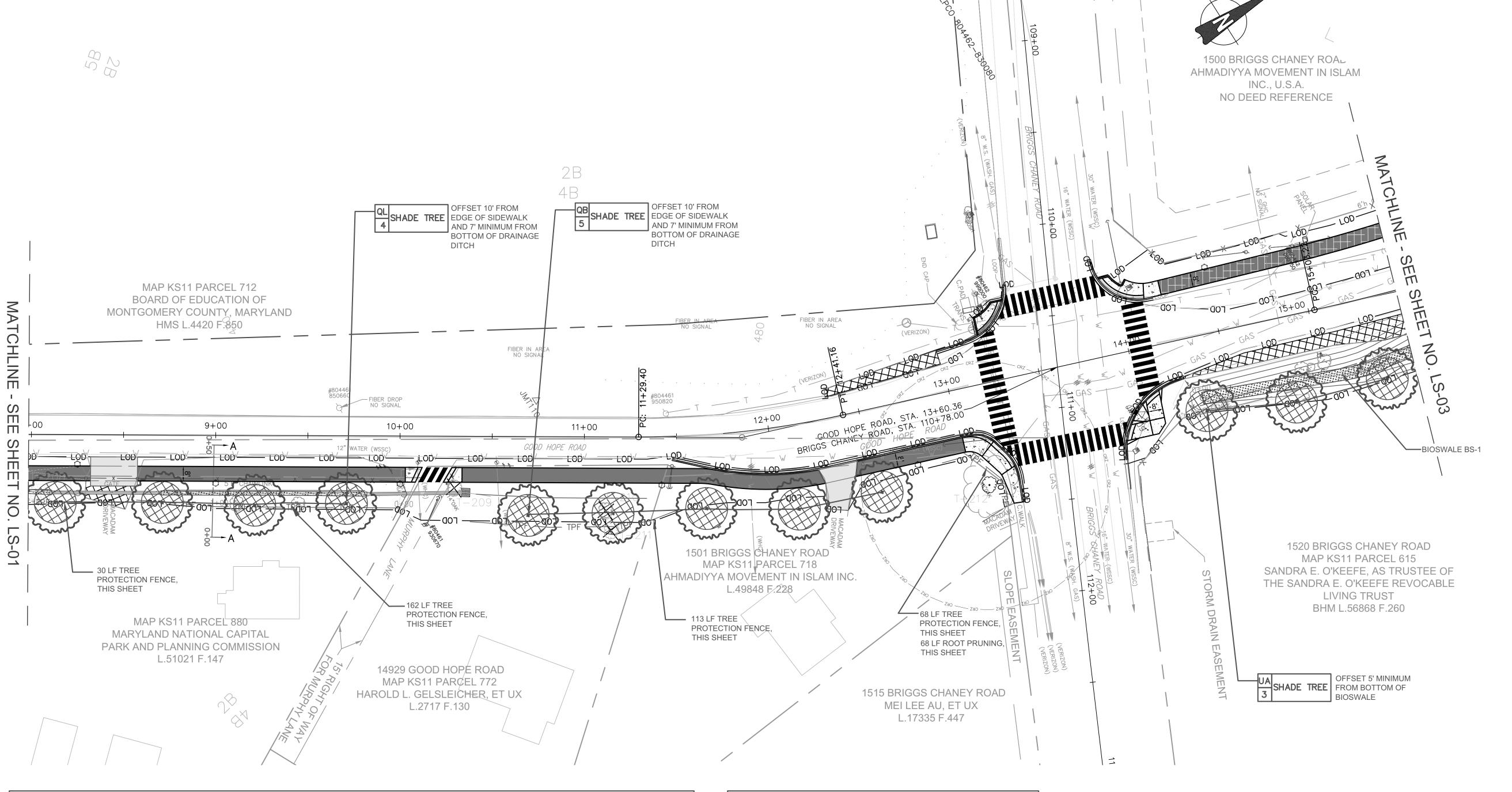
REVIEWED BY Brian Lewandowski

APPROVED BY CHIEF, CONSTRUCTION SECTION

DATE APPROVED 12/14/2021

# THIS IS NOT A PERMIT TO BEGIN CONSTRUCTION

This approval is for technical review only. For permit information, contact Jay Childs, Construction Supervisor at (301) 495-2574



#### NOTE:

- 1. REFER TO SIGNING AND STRIPING PLAN FOR PAVEMENT
- MARKING DETAILS.

  2. CONTRACTOR SHALL FIELD ADJUST GRADING TO PROVIDE SMOOTH TRANSITIONS INTO EXISTING FEATURES AND PROMOTE SHEET FLOW WHERE POSSIBLE. ALL GRADING CHANGES TO BE PRE-APPROVED BY COUNTY INSPECTOR.
- PRE—APPROVED BY COUNTY INSPECTOR.

  3. INSTALL SHRUB DEER PROTECTION DEVICES AS PER DETAIL.
  PROTECTION SHALL BE PROVIDED FOR EACH GROUP OF 4
  SHRUBS, MAXIMUM.
- 4. INSTALL TREE DEER PROTECTION DEVICES AS PER DETAIL.
  5. UNLESS OTHERWISE SPECIFIED, ALL DISTURBED AREAS SHALL BE STABILIZED WITH:
  - 4" OF TOPSOIL
  - TURFGRASS SEED MIX
    - 20% VIRGINIA WILD RYE
    - 20% RIPARIAN WILD RYE20% DEER TONGUE
    - 20% CREEPING RED FESCUE20% ANNUAL RYE
  - 20% A — MULCH

8. REFER TO PLAN SHEET LS-09 FOR SPECIFIC NOTES
PERTAINING TO TREE PRESERVATION, INVASIVE SPECIES,
INSPECTIONS, AND TREE CANOPY INFORMATION.
9. PLEASE SEE SHEET LS-07 FOR TREE PLANTING DETAIL.
10. PLEASE SEE SHEET LS-09 FOR STANDARD TREE CANOPY
NOTES.

		LANDSC	APE PLANT SC	HEDULE		
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENTS
TREES *UA	3	ULMUS AMERICANA 'JEFFERSON'	AMERICAN ELM 'JEFFERSON'	2.5" CAL.	B&B	50' O.C., AS SHOWN
*QB	5	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	B&B	50' O.C., AS SHOWN
*QL	4	QUERCUS LYRATA	OVERCUP OAK	2.5" CAL.	B&B	50' O.C., AS SHOWN

BIOSWALE BOTTOMS SHALL BE SEEDED WITH MDOT SHA'S BIORETENTION SOIL MIX MEADOW ESTABLISHMENT, SEE SPECIFICATIONS FOR APPLICATION RATES.

FORBS
BLACKEYED SUSAN
PARTRIDGE PEA
RED CLOVER

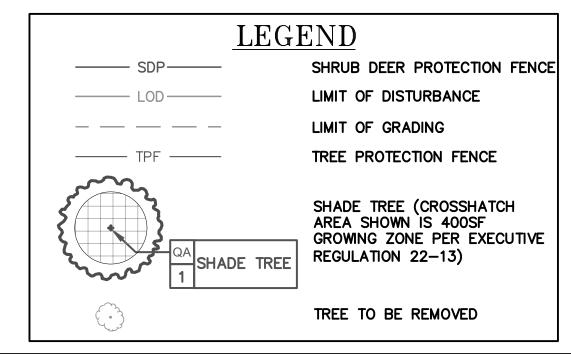
DEERTONGUE
HARD FESCUE
WEEPING ALKALIGRASS
PURPLETOP

VIRGINIA WILD RYE

<u>GRASSES</u>

SWITCHGRASS

\*SHADE TREE TO FULFILL MONTGOMERY COUNTY TREE CANOPY REQUIREMENT.



					MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND	
					RECOMMENDED FOR APPROVAL REFER TO TITLE SHEET FOR SIGNATURES	
					Chief, Design Section Date  APPROVED	_
<b>1</b>					REFER TO TITLE SHEET FOR SIGNATURES  Chief, Division of Transportation Engineering  Date	_   <u> </u>
	NO.	REVISION	DATE	BY	Designed by: SBD Drawn by: SBD Checked by: SJR	

LS-02 LANDSCAPE PLAN

GOOD HOPE ROAD SHARED USE PATH

0 30' 60' DATUM: NAD 83(2011) HORIZ
NAVD 88 VERT

SCALE: 1"=30' DATE: DECEMBER 2021

Project No.: 501902 SHEET 79 of 135



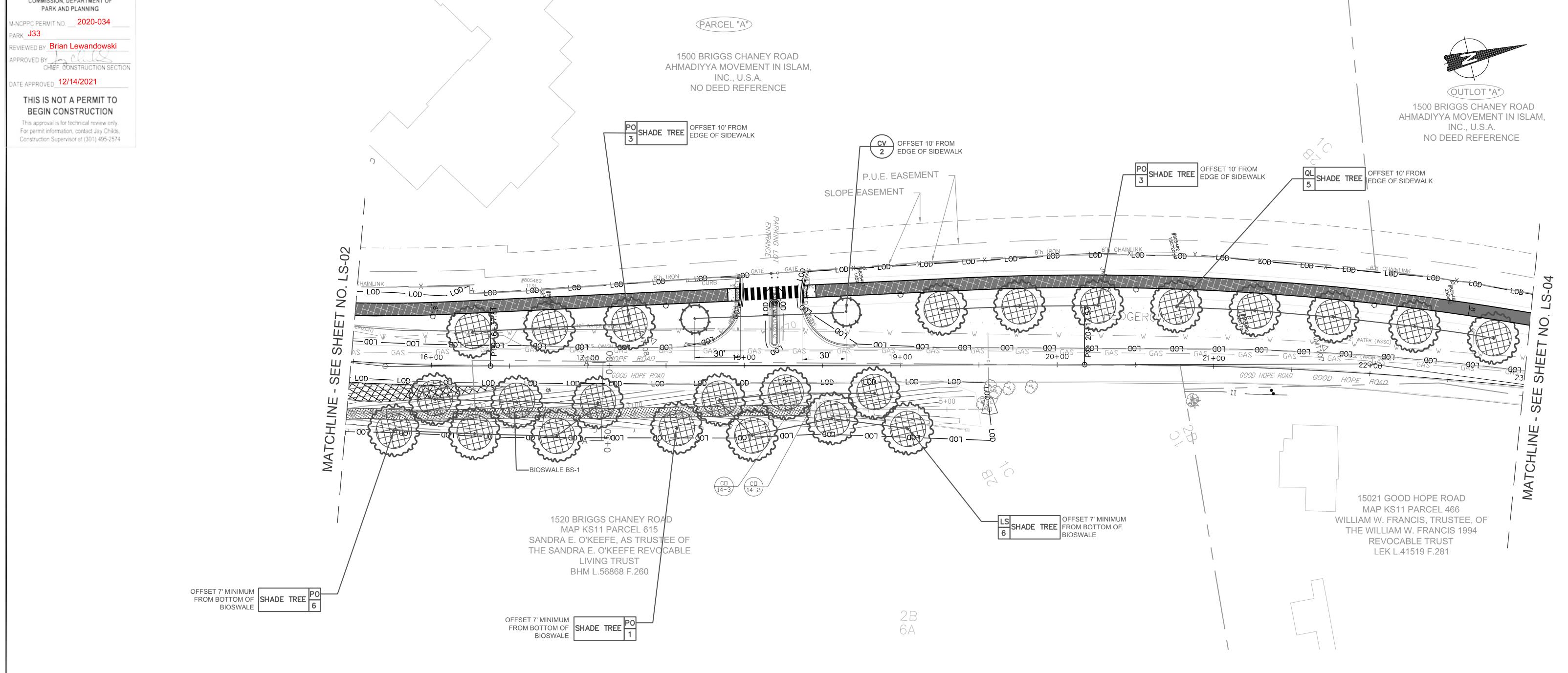


REVIEWED BY Brian Lewandowski

DATE APPROVED 12/14/2021

## THIS IS NOT A PERMIT TO

This approval is for technical review only. For permit information, contact Jay Childs, Construction Supervisor at (301) 495-2574



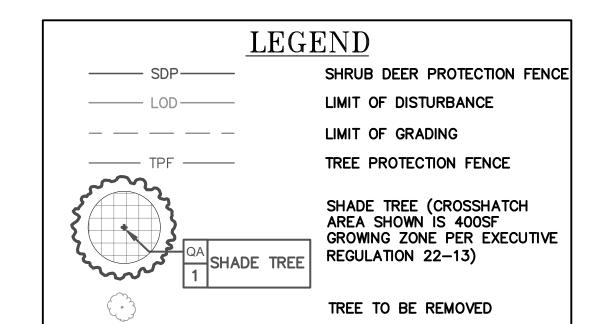
#### NOTE:

- . REFER TO SIGNING AND STRIPING PLAN FOR PAVEMENT MARKING DETAILS.
- 2. CONTRACTOR SHALL FIELD ADJUST GRADING TO PROVIDE SMOOTH TRANSITIONS INTO EXISTING FEATURES AND PROMOTE SHEET FLOW WHERE POSSIBLE. ALL GRADING CHANGES TO BE PRE-APPROVED BY COUNTY INSPECTOR.
- 3. INSTALL SHRUB DEER PROTECTION DEVICES AS PER DETAIL. PROTECTION SHALL BE PROVIDED FOR EACH GROUP OF 4 SHRUBS, MAXIMUM.
- 4. INSTALL TREE DEER PROTECTION DEVICES AS PER DETAIL. 5. UNLESS OTHERWISE SPECIFIED, ALL DISTURBED AREAS SHALL BE STABILIZED WITH:
  - 4" OF TOPSOIL
  - TURFGRASS SEED MIX
    - 20% VIRGINIA WILD RYE - 20% RIPARIAN WILD RYE
    - 20% DEER TONGUE
    - 20% CREEPING RED FESCUE
    - 20% ANNUAL RYE

MULCH 8. REFER TO PLAN SHEET LS-09 FOR SPECIFIC NOTES PERTAINING TO TREE PRESERVATION, INVASIVE SPECIES, INSPECTIONS, AND TREE CANOPY INFORMATION. 9. PLEASE SEE SHEET LS-07 FOR TREE PLANTING DETAIL. 10. PLEASE SEE SHEET LS-09 FOR STANDARD TREE CANOPY

		LANDSC	APE PLANT SC	HEDULE		
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENTS
REES						
CV	2	CRATAEGUS VIRIDIS	'WINTER KING' HAWTHORN	2.5" CAL.	B&B	30' O.C., AS SHOWN
		'WINTER KING'				
*LS	6	LIQUIDAMBAR STYRACIFLUA	SWEETGUM 'ROTUNDILOBA'	2.5" CAL.	B&B	50' O.C., AS SHOWN
		'ROTUNDILOBA'				
*P0	13	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2.5" CAL.	B&B	50' O.C., AS SHOWN
*QL	5	QUERCUS LYRATA	OVERCUP OAK	2.5" CAL.	B&B	50' O.C., AS SHOWN

\*SHADE TREE TO FULFILL MONTGOMERY COUNTY TREE CANOPY REQUIREMENT.



BIOSWALE BOTTOMS SHALL BE SEEDED WITH MDOT SHA'S BIORETENTION SOIL MIX MEADOW ESTABLISHMENT, SEE SPECIFICATIONS FOR APPLICATION RATES.

DATE

**FORBS** BLACKEYED SUSAN PARTRIDGE PEA RED CLOVER

<u>GRASSES</u> **SWITCHGRASS** DEERTONGUE HARD FESCUE WEEPING ALKALIGRASS PURPLETOP

VIRGINIA WILD RYE

APPROVED

MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL

Chief, Division of Transportation Engineering

REFER TO TITLE SHEET FOR SIGNATURES Chief, Design Section REFER TO TITLE SHEET FOR SIGNATURES

Designed by: SBD Drawn by: SBD Checked by: SJR

LS-03 LANDSCAPE PLAN

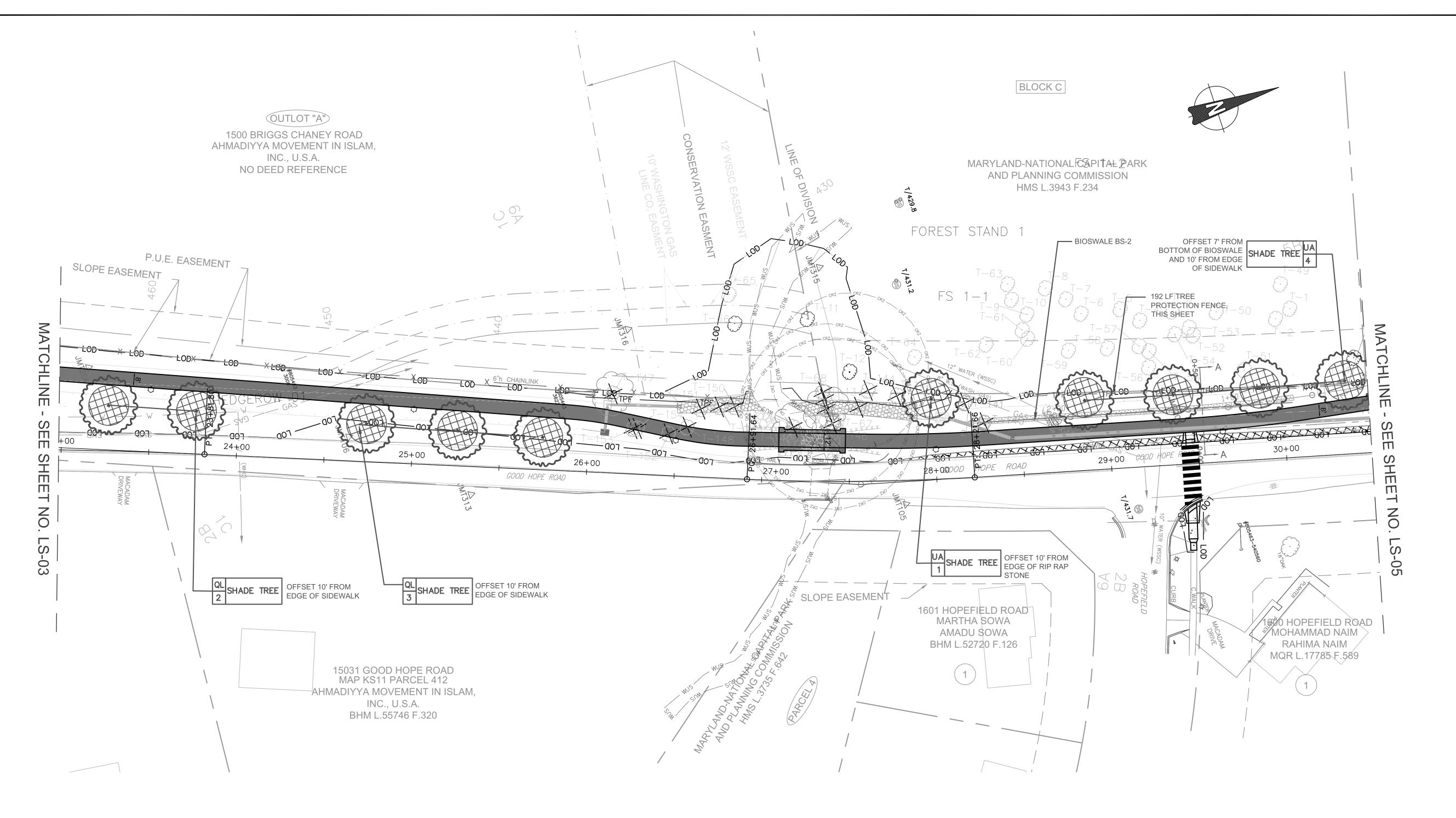
GOOD HOPE ROAD

SHARED USE PATH

SCALE: 1"=30' Project No. : <u>501902</u> DATUM: NAD 83(2011) HORIZ NAVD 88 VERT DATE: DECEMBER 2021 SHEET <u>80</u> of <u>135</u>







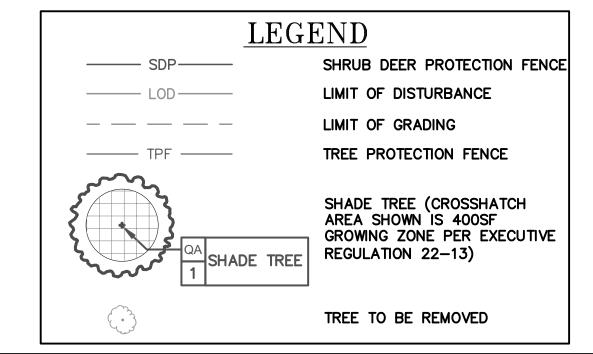
# NOTE:

- 1. REFER TO SIGNING AND STRIPING PLAN FOR PAVEMENT MARKING DETAILS.
- 2. CONTRACTOR SHALL FIELD ADJUST GRADING TO PROVIDE SMOOTH TRANSITIONS INTO EXISTING FEATURES AND PROMOTE SHEET FLOW WHERE POSSIBLE. ALL GRADING CHANGES TO BE PRE—APPROVED BY COUNTY INSPECTOR.
- 3. INSTALL SHRUB DEER PROTECTION DEVICES AS PER DETAIL. PROTECTION SHALL BE PROVIDED FOR EACH GROUP OF 4 SHRUBS, MAXIMUM.
- 4. INSTALL TREE DEER PROTECTION DEVICES AS PER DETAIL.
- 5. UNLESS OTHERWISE SPECIFIED, ALL DISTURBED AREAS SHALL BE STABILIZED WITH:
  - 4" OF TOPSOIL
  - TURFGRASS SEED MIX20% VIRGINIA WILD RYE
    - 20% RIPARIAN WILD RYE
    - 20% NIPANIAN WILD NI - 20% DEER TONGUE
    - 20% CREEPING RED FESCUE
- 20% ANNUAL RYE– MULCH
- 8. REFER TO PLAN SHEET LS-09 FOR SPECIFIC NOTES PERTAINING TO TREE PRESERVATION, INVASIVE SPECIES, INSPECTIONS, AND TREE CANOPY INFORMATION.

  9. PLEASE SEE SHEET LS-07 FOR TREE PLANTING DETAIL.
- 9. PLEASE SEE SHEET LS-07 FOR TREE PLANTING DETAIL.
  10. PLEASE SEE SHEET LS-09 FOR STANDARD TREE CANOPY NOTES.

		LANDSC	APE PLANT SC	HEDULE		
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENTS
TREES *UA *QL	5 5	ULMUS AMERICANA 'JEFFERSON' QUERCUS LYRATA	AMERICAN ELM 'JEFFERSON' OVERCUP OAK	2.5" CAL. 2.5" CAL.	B&B B&B	50' O.C., AS SHOWN 50' O.C., AS SHOWN

\*SHADE TREE TO FULFILL MONTGOMERY COUNTY TREE CANOPY REQUIREMENT.



BIOSWALE BOTTOMS SHALL BE SEEDED WITH MDOT SHA'S BIORETENTION SOIL MIX MEADOW ESTABLISHMENT, SEE SPECIFICATIONS FOR APPLICATION RATES.

FORBS

BLACKEYED SUSAN

PARTRIDGE PEA

RED CLOVER

GRASSES
SWITCHGRASS
DEERTONGUE
HARD FESCUE
WEEPING ALKALIGRASS
PURPLETOP

PURPLETOP
VIRGINIA WILD RYE



	MONTGOMERY COUNTY
	DEPARTMENT OF TRANSPORTATION
	ROCKVILLE, MARYLAND
	RECOMMENDED FOR APPROVAL
	RECOMMENDED FOR APPROVAL

Chief, Division of Transportation Engineering

REFER TO TITLE SHEET FOR SIGNATURES

Chief, Design Section Date

APPROVED

REFER TO TITLE SHEET FOR SIGNATURES

Designed by: SBD Drawn by: SBD Checked by: SJR

LS-04 LANDSCAPE PLAN
GOOD HOPE ROAD

SHARED USE PATH

O 30' 60' DATUM: NAD 83(2 NAVD 88

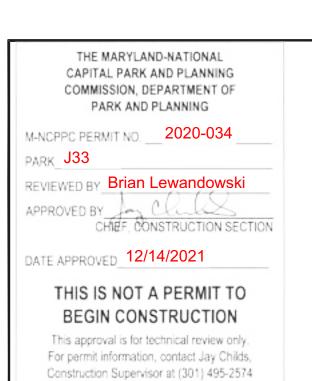
SCALE: 1"=30' DATE: DECEMBER

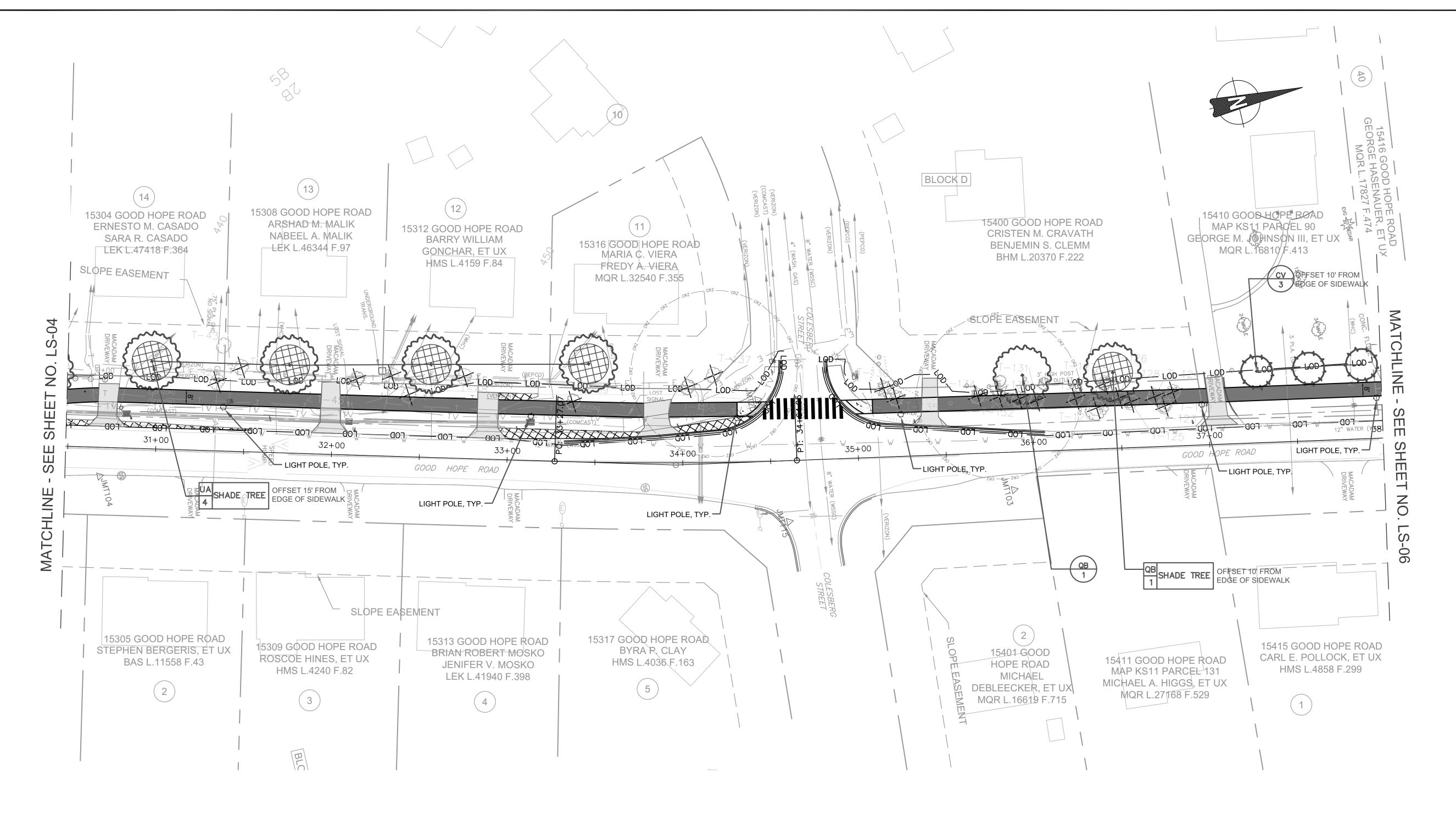
Project No. : <u>501902</u>

DATUM: NAD 83(2011) HORIZ
NAVD 88 VERT
DATE: DECEMBER 2021

SHEET \_\_\_81 \_\_\_ of \_\_\_135\_\_







#### NOTE:

- 1. REFER TO SIGNING AND STRIPING PLAN FOR PAVEMENT
- MARKING DETAILS.

  2. CONTRACTOR SHALL FIELD ADJUST GRADING TO PROVIDE SMOOTH TRANSITIONS INTO EXISTING FEATURES AND PROMOTE SHEET FLOW WHERE POSSIBLE. ALL GRADING CHANGES TO BE PRE-APPROVED BY COUNTY INSPECTOR.
- 3. INSTALL SHRUB DEER PROTECTION DEVICES AS PER DETAIL. PROTECTION SHALL BE PROVIDED FOR EACH GROUP OF 4 SHRUBS, MAXIMUM.
- 4. INSTALL TREE DEER PROTECTION DEVICES AS PER DETAIL.
  5. UNLESS OTHERWISE SPECIFIED, ALL DISTURBED AREAS SHALL BE STABILIZED WITH:
  - 4" OF TOPSOILTURFGRASS SEED MIX
    - 20% VIRGINIA WILD RYE
    - 20% RIPARIAN WILD RYE
    - 20% DEER TONGUE20% CREEPING RED FESCUE
    - 20% ANNUAL RYE

- MULCH

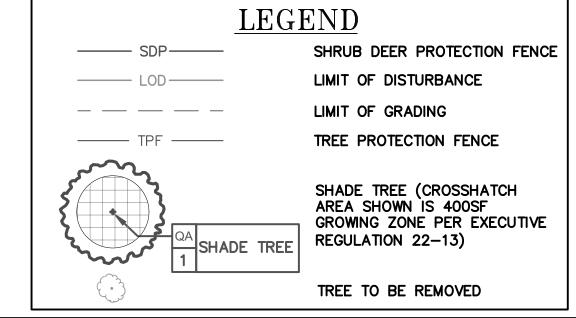
8. REFER TO PLAN SHEET LS-09 FOR SPECIFIC NOTES
PERTAINING TO TREE PRESERVATION, INVASIVE SPECIES,
INSPECTIONS, AND TREE CANOPY INFORMATION.

9. PLEASE SEE SHEET LS-07 FOR TREE PLANTING DETAIL.

10. PLEASE SEE SHEET LS-09 FOR STANDARD TREE CANOPY
NOTES.

	LANDSCAPE PLANT SCHEDULE									
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENTS				
TREES *UA	4	ULMUS AMERICANA 'JEFFERSON'	AMERICAN ELM 'JEFFERSON'	2.5" CAL.	B&B	50' O.C., AS SHOWN				
CV	3	CRATAEGUS VIRIDIS 'WINTER KING'	'WINTER KING' HAWTHORN	2.5" CAL.	В&В	30' O.C.				
*QB	2	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	В&В	50' O.C., AS SHOWN				

\*SHADE TREE TO FULFILL MONTGOMERY COUNTY TREE CANOPY REQUIREMENT.



BIOSWALE BOTTOMS SHALL BE SEEDED WITH MDOT SHA'S BIORETENTION SOIL MIX MEADOW ESTABLISHMENT, SEE SPECIFICATIONS FOR APPLICATION RATES.

FORBS

BLACKEYED SUSAN

PARTRIDGE PEA

RED CLOVER

GRASSES
SWITCHGRASS
DEERTONGUE
HARD FESCUE
WEEPING ALKALIGRASS
PURPLETOP

PURPLETOP
VIRGINIA WILD RYE

				MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND	
				RECOMMENDED FOR APPROVAL REFER TO TITLE SHEET FOR SIGNATURES	
				Chief, Design Section Date  APPROVED  REFER TO TITLE SHEET FOR SIGNATURES	- 0 <u>L</u>
				Chief, Division of Transportation Engineering Date	- S
NO.	REVISION	DATE	BY	Designed by: SBD Drawn by: SBD Checked by: SJR	Pro

LS-05 LANDSCAPE PLAN

GOOD HOPE ROAD SHARED USE PATH

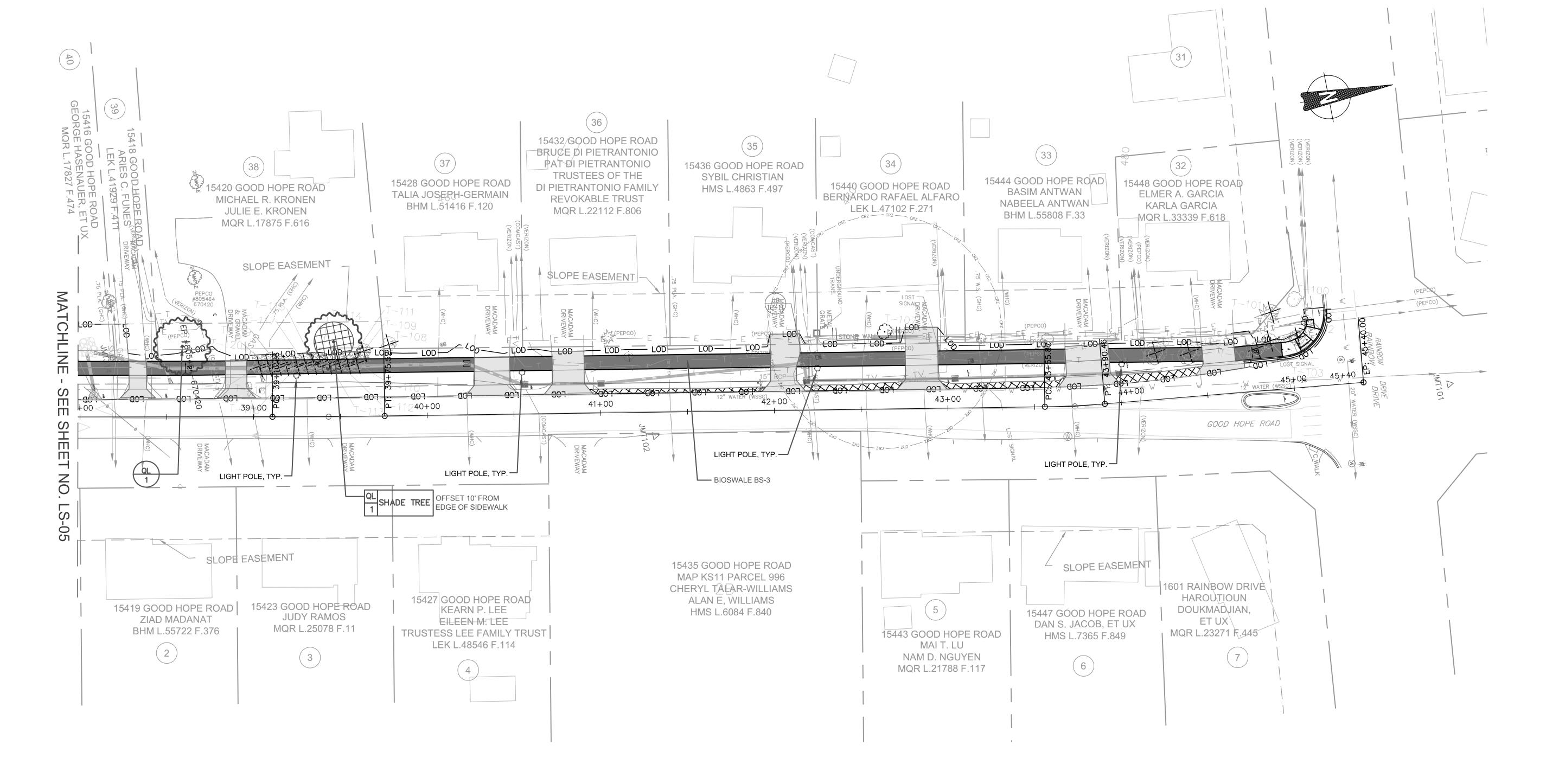
DATUM: NAD 83(2011) HORIZ NAVD 88 VERT

SCALE: 1"=30' DATE: DECEMBER 2021

Project No.: 501902 SHEET 82 of 135







1. TREATMENT A: TREE TO REMAIN. 2. TREATMENT B: REMOVE TREE INCLUDING STUMP. 3. REFER TO SIGNING AND STRIPING PLAN FOR PAVEMENT

MARKING DETAILS. 4. CONTRACTOR SHALL FIELD ADJUST GRADING TO PROVIDE SMOOTH TRANSITIONS INTO EXISTING FEATURES AND PROMOTE SHEET FLOW WHERE POSSIBLE. ALL GRADING CHANGES TO BE PRE-APPROVED BY COUNTY INSPECTOR.

5. INSTALL SHRUB DEER PROTECTION DEVICES AS PER DETAIL. PROTECTION SHALL BE PROVIDED FOR EACH GROUP OF 4 SHRUBS, MAXIMUM. 6. INSTALL TREE DEER PROTECTION DEVICES AS PER DETAIL.

7. UNLESS OTHERWISE SPECIFIED, ALL DISTURBED AREAS SHALL BE STABILIZED WITH:

- 4" OF TOPSOIL

- TURFGRASS SEED MIX

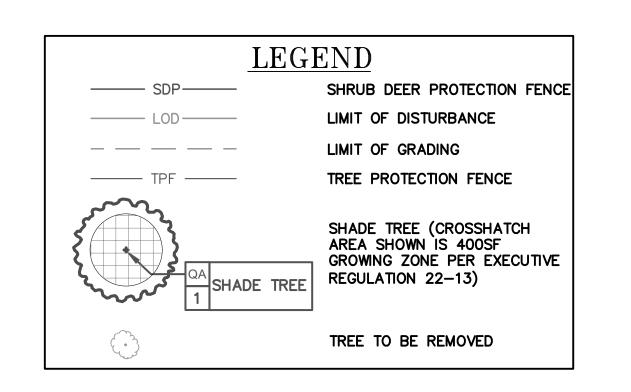
- 20% VIRGINIA WILD RYE - 20% RIPARIAN WILD RYE

- 20% DEER TONGUE - 20% CREEPING RED FESCUE - 20% ANNUAL RYE

MULCH 8. REFER TO PLAN SHEET LS-09 FOR SPECIFIC NOTES PERTAINING TO TREE PRESERVATION, INVASIVE SPECIES, INSPECTIONS, AND TREE CANOPY INFORMATION. 9. PLEASE SEE SHEET LS-07 FOR TREE PLANTING DETAIL. 10. PLEASE SEE SHEET LS-09 FOR STANDARD TREE CANOPY NOTES.

		LAND	SCAPE PLANT	SCHEDULE		
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENTS
TREES *QL	2	QUERCUS LYRATA	OVERCUP OAK	2.5" CAL.	B&B	50' O.C., AS SHOWN

\*SHADE TREE TO FULFILL MONTGOMERY COUNTY TREE CANOPY REQUIREMENT.



BIOSWALE BOTTOMS SHALL BE SEEDED WITH MDOT SHA'S BIORETENTION SOIL MIX MEADOW ESTABLISHMENT, SEE SPECIFICATIONS FOR APPLICATION RATES.

DATE

VIRGINIA WILD RYE

**FORBS** <u>GRASSES</u> SWITCHGRASS BLACKEYED SUSAN PARTRIDGE PEA DEERTONGUE RED CLOVER HARD FESCUE WEEPING ALKALIGRASS PURPLETOP

> MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION

ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL REFER TO TITLE SHEET FOR SIGNATURES Chief, Design Section APPROVED REFER TO TITLE SHEET FOR SIGNATURES Chief, Division of Transportation Engineering

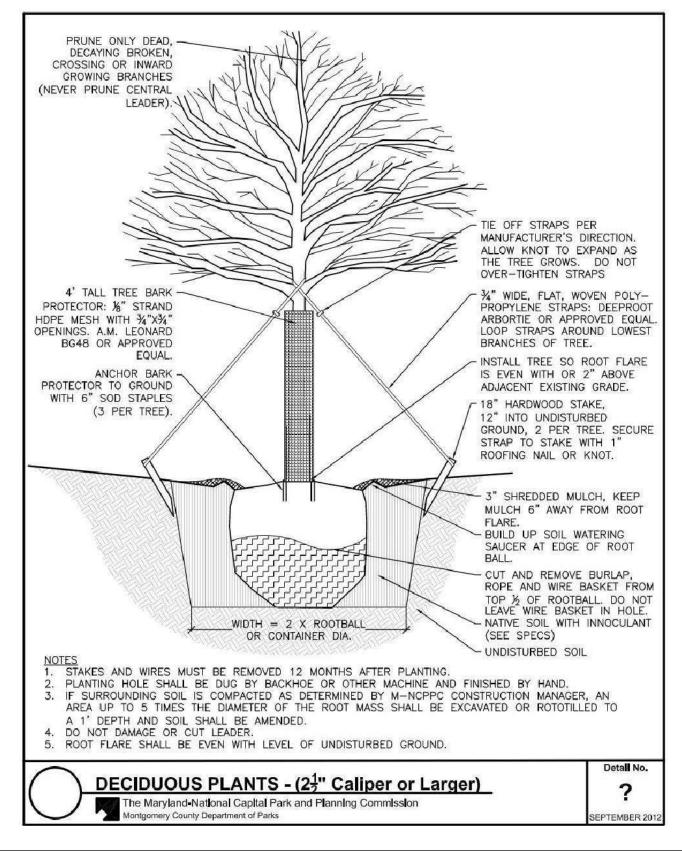
Designed by: SBD Drawn by: SBD Checked by: SJR

LS-06 LANDSCAPE PLAN

GOOD HOPE ROAD SHARED USE PATH

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT SCALE: 1"=30' DATE: DECEMBER 2021 Project No. : <u>501902</u> SHEET <u>83</u> of <u>135</u>





DEAD BRANCH

BRANCH

Pruning a Branch

transmitting the disease on tools.

wound dressing.

Old injuries are to be inspected. Those not closing properly and where the callus growth is not already completely established should be traced where appropriate.

All girdling roots visible to the eye are to be reported to the supervisor and the

The presence of any structural weakness, disease conditions, decayed trunk or

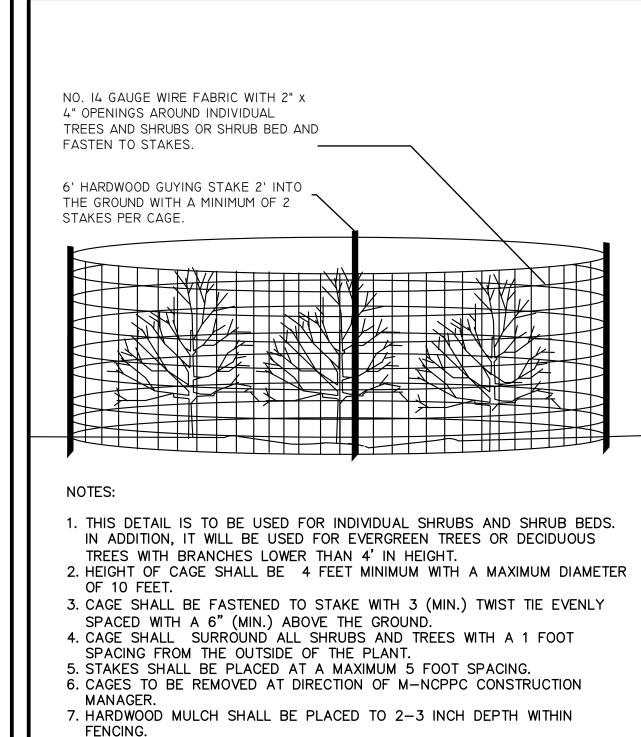
branches, split crotches or branches, should be reported in writing to the

CROWN PRUNING

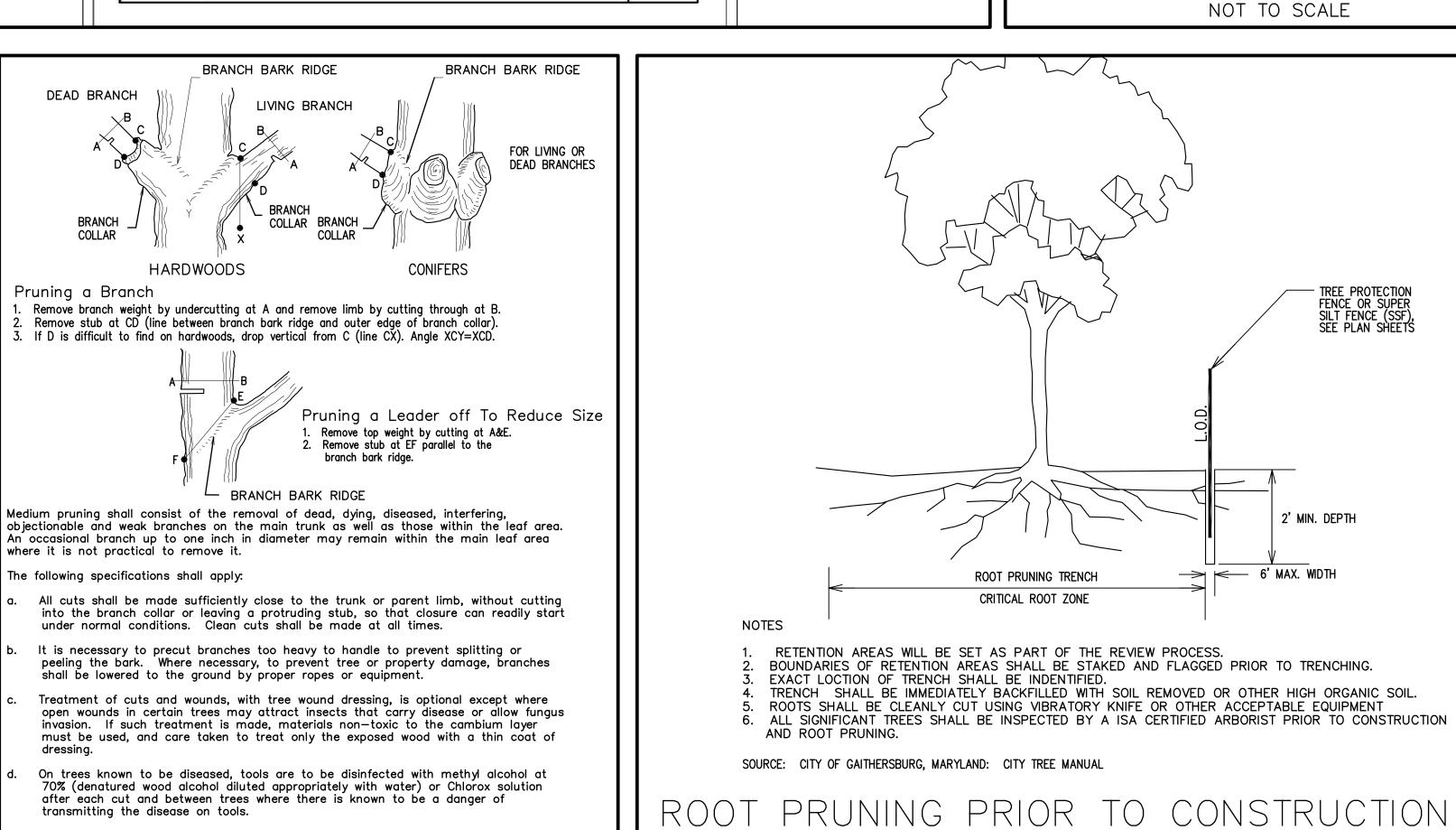
NOT TO SCALE

supervisor and the Engineer, and corrective measures recommended.

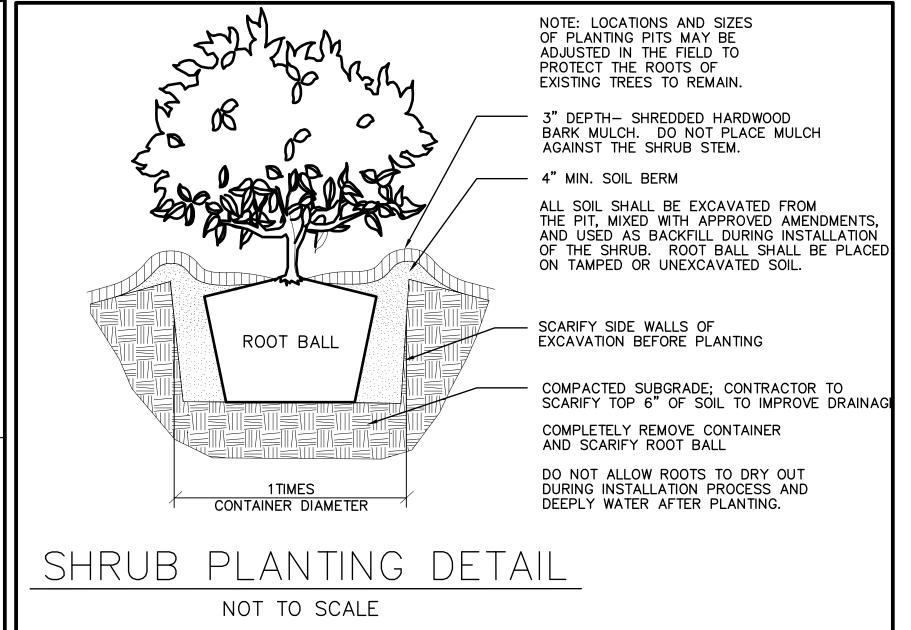
If desired, for cosmetic purposes, the wound may be treated with a thin coat of

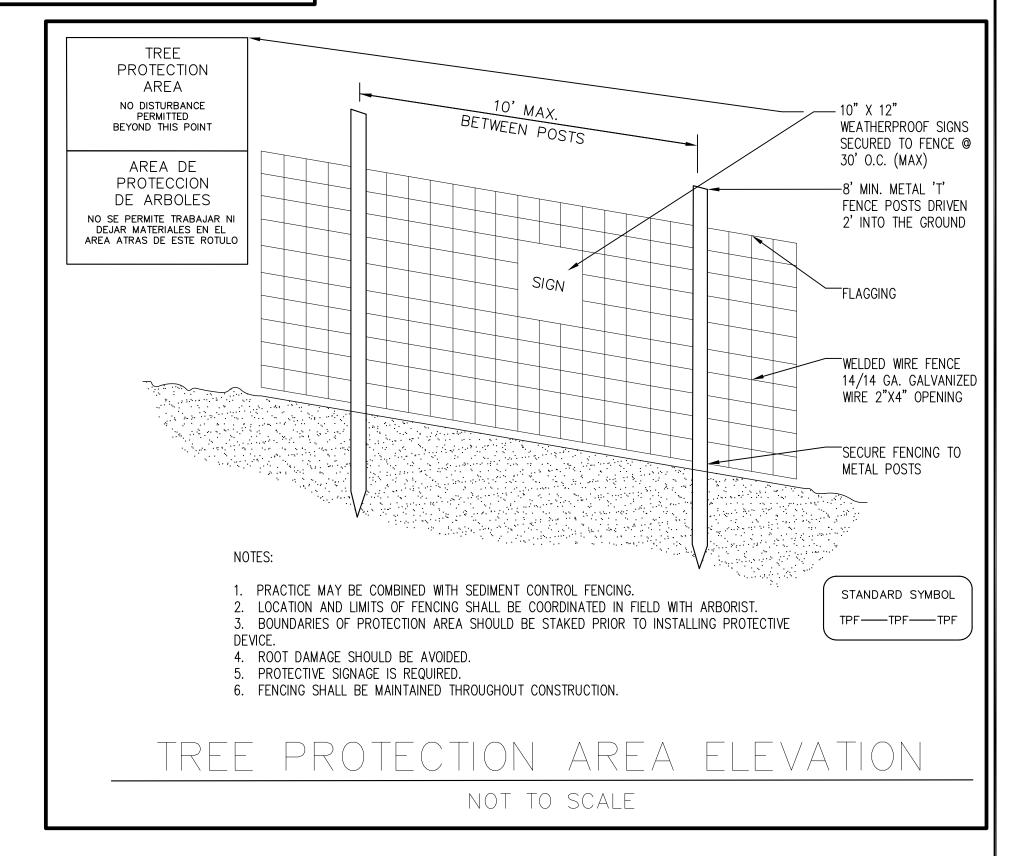


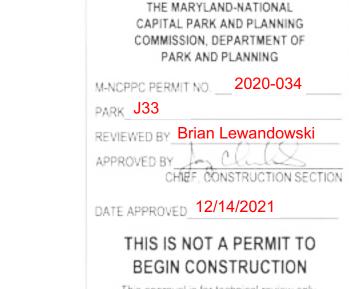
SHRUB DEER PROTECTION



(IF NEEDED)







LS-07 LANDSCAPE DETAIL SHEET

THIS IS NOT A PERMIT TO BEGIN CONSTRUCTION

This approval is for technical review only.

For permit information, contact Jay Childs, Construction Supervisor at (301) 495-2574

ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL REFER TO TITLE SHEET FOR SIGNATURES Chief, Design Section APPROVED REFER TO TITLE SHEET FOR SIGNATURES

Chief, Division of Transportation Engineering

MONTGOMERY COUNTY

DEPARTMENT OF TRANSPORTATION

Designed by: SBD Drawn by: SBD Checked by: SJR

GOOD HOPE ROAD SHARED USE PATH

SCALE: 1"=30'

Project No. : <u>501902</u>

DATE: DECEMBER 2021 SHEET <u>84</u> of <u>135</u>





	LANDSCAPE PLANT SCHEDULE (TOTAL)										
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	COMMENTS					
TREES											
*UA	12	ULMUS AMERICANA 'JEFFERSON'	AMERICAN ELM 'JEFFERSON'	2.5" CAL.	В&В	50' O.C., AS SHOWN					
*CO	11	CELTIS OCCIDENTALIS	COMMON HACKBERRY	2.5" CAL.	В&В	50' O.C., AS SHOWN					
CV	5	CRATAEGUS VIRIDIS 'WINTER KING'	'WINTER KING' HAWTHORN	2.5" CAL.	В&В	30' O.C., AS SHOWN					
*LS	6	LIQUIDAMBAR STYRACIFLUA	SWEETGUM 'ROTUNDILOBA'	2.5" CAL.	В&В	50' O.C., AS SHOWN					
		'ROTUNDILOBA'									
*P0	13	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	2.5" CAL.	В&В	50' O.C., AS SHOWN					
*QB	7	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	В&В	50' O.C., AS SHOWN					
*QL	17	QUERCUS LYRATA	OVERCUP OAK	2.5" CAL.	В&В	50' O.C., AS SHOWN					

\*SHADE TREE TO FULFILL MONTGOMERY COUNTY TREE CANOPY REQUIREMENT.

	Riparian Seed	Mix				
% of mix by species (20 lbs/acre native spp.)	Common Name	Species				
25%	Creeping red fescue	Festuca rubra				
20%	Virginia wild rye	Elymus virginicus				
15%	Purple Top	Tridens flavus				
30%	Riverbank wild rye	Elymus riparius				
10%	Deer tongue grass	Dichanthelium clandestinum				
	Erosion Control to be In-	cluded in Mix				
lbs Per Acre	Туре	Usage Dates				
50	Oats or Barley	Nov. 1st thru March 15th				
15	Foxtail Millet	May 15th thru Aug 15th				
25	Annual Ryegrass	March 16th thru May 14th and Aug 16th thru Oct. 31st				

This native seed mix has an application rate of 20+/- lbs/acre. Add an inexpensive, erosion control seed (types listed above) and spread at the

Therefore, if the native seed is 20 lbs/acre and the erosion control grass is 15 lbs/acre, total rate will be 35 lbs seed total/acre.

Apply a weed free straw mulch at the end

TABLE 3 - MEADOW SEED SPECIES AND APPLICATION RATES								
FORBS	PURE LI	VE SEED *	GRASSES	PURE LIV	VE SEED *			
Include All	GRAM PER SY	LB PER ACRE	Include All	GRAM PER SY	LB PER ACRE			
Blackeyed Susan	ekeyed Susan 0.094 1.0		Switchgrass	0.188	2.0			
Partridge Pea	0.188	2.0	Deertongue	0.188	2.0			
Red Clover	0.188	2.0	Hard Fescue	0.938	10.0			
	Note:		Alkaligrass	0.188	2.0			
The rate shown is Pure purity data from the see			Purpletop	0.188	2.0			
rate needed to obtain t			Virginia Wildrye	0.094	1.0			

SEE SPECIFICATIONS FOR MEASUREMENT AND PAYMENT, ETC.

*LIVE	FASCINE PLA	NT SCHE	DULE (TOTAI	_)			
BOTANICAL NAME	COMMON NAME	LENGTH OF WHIP	DIAMETER OF FASCINE	QUANTIT	Υ		
CORNUS AMOMUM	SILKY DOGWOOD	6' TO 8'	4"-10"	N/A			
CORNUS SERICEA	RED-OSIER DOGWOOD	6' TO 8'	4"-10"	N/A			
SALIX PURPUREA	STREAMCO WILLOW	6' TO 8'	4"-10"	N/A			
SALIX SERICEA	SILKY WILLOW	6' TO 8'	4"-10"	N/A			
*SEE STREAM IMPROVEMENT SHEETS (SR-01-SR05) FOR FOR PLANT LOCATIONS.  TOTAL 79'							

\*SEE STREAM IMPROVEMENT SHEETS (SR-01-SR05) FOR FOR PLANT LOCATIONS. NOTE: EQUAL QUANTITIES OF ALL 4 SPECIES SHALL BE COMBINED TO FORM EACH FASCINE BUNDLE

*LIVESTAKE PLANT SCHEDULE								
BOTANICAL NAME	COMMON NAME	DIAMETER (INCHES)	LENGTH (FT)	QTY				
CORNUS AMOMUM	SILKY DOGWOOD	$\frac{3}{4}$ - 1.5	3 MIN.	23				
SALIX PURPUREA	STREAMCO WILLOW	$\frac{3}{4}$ - 1.5	3 MIN.	23				
SALIX SERICEA	SILKY WILLOW	$\frac{3}{4}$ - 1.5	3 MIN.	23				
SALIX X COTTETI	DWARF WILLOW	$\frac{3}{4}$ - 1.5	3 MIN.	23				
SAMBUCUS CANADENSIS	ELDERBERRY	$\frac{3}{4}$ - 1.5	3 MIN.	23				
			TOTAL	116				

\*SEE STREAM IMPROVEMENT SHEETS (SR-01-SR05) FOR FOR PLANT LOCATIONS. LIVESTAKE NOTES:

- 1. AN EQUAL AMOUNT OF EACH SPECIES SHALL BE PLANTED IN THE AREAS INDICATED ON THE PLANS.
- 2. LIVESTAKES SHALL BE PLANTED AT A DENSITY OF 2 FEET ON-CENTER.

COMMISSION, DEPARTMENT OF PARK AND PLANNING M-NCPPC PERMIT NO. \_\_\_ 2020-034 \_ PARK\_J33 REVIEWED BY Brian Lewandowski
APPROVED BY CHIEF, CONSTRUCTION SECTION DATE APPROVED 12/14/2021 THIS IS NOT A PERMIT TO BEGIN CONSTRUCTION This approval is for technical review only. For permit information, contact Jay Childs, Construction Supervisor at (301) 495-2574

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING



REVISION

	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND
	REFER TO TITLE SHEET FOR SIGNATURES
	Chief, Design Section Date  APPROVED
	REFER TO TITLE SHEET FOR SIGNATURES

DATE BY

Chief, Division of Transportation Engineering

Designed by: SBD Drawn by: SBD Checked by: SJR

LS-08 LANDSCAPE PLANT SCHEDULE SHEET GOOD HOPE ROAD

SHARED USE PATH

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT DATE: DECEMBER 2021 SCALE: 1"=30' Project No. : <u>501902</u> SHEET <u>85</u> of <u>135</u>



# TREE PRESERVATION NOTES

- 1. ALL WORK PERFORMED SHALL MEET OR EXCEED INDUSTRY STANDARDS AS MOST RECENTLY PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), OR THE TREE CARE INDUSTRY ASSOCIATION (TCIA). IN THE EVENT TREATMENTS PRESCRIBED ARE NOT COVERED BY AN EXISTING STANDARD, WORK SHALL MEET OR EXCEED STANDARDS APPROVED BY M-NCPPC.
- 2. TREES DESIGNATED FOR REMOVAL ALONG THE LIMITS OF DISTURBANCE SHALL BE REMOVED USING A CHAINSAW TO AVOID DAMAGE TO SURROUNDING TREES TO BE PRESERVED AND UNDERSTORY VEGETATION. IF A STUMP MUST BE REMOVED, THIS SHALL BE DONE ONLY WITH THE APPROVAL OF M-NCPPC USING A STUMP-GRINDING MACHINE IN A MANNER THAT CAUSES AS LITTLE DISTURBANCE AS POSSIBLE TO ADJACENT TREES, VEGETATION AND SOIL CONDITIONS.
- 3. ROOT PRUNING SHALL BE PERFORMED, AS NEEDED, TO COMPLY WITH THE FOREST CONSERVATION REQUIREMENTS OF THESE DEVELOPMENT CONDITIONS. ALL TREATMENTS SHALL BE CLEARLY IDENTIFIED, LABELED, AND DETAILED ON THE TREE PRESERVATION AND LANDSCAPE SHEETS OF THE PLAN SUBMISSION. THE DETAILS FOR THESE TREATMENTS SHALL BE REVIEWED AND APPROVED BY M-NCPPC. ACCOMPLISHED IN A MANNER THAT PROTECTS AFFECTED AND ADJACENT VEGETATION TO BE PRESERVED. ROOT PRUNING DETAILS MAY INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: (1) ROOT PRUNING SHALL BE DONE WITH A TRENCHER OR VIBRATORY PLOW TO A DEPTH OF 18 INCHES; (2) ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING AND/OR INSTALLATION OF SUPER SILT FENCE, DIVERSION FENCE OR TREE PROTECTION FENCE; (3) ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF THE PARK URBAN FORESTER; AND (4) A M-NCPPC REPRESENTATIVE SHALL BE INFORMED WHEN ALL ROOT PRUNING AND TREE PROTECTION FENCE INSTALLATION IS COMPLETE.
- 4. IMMEDIATELY AFTER THE E&S ACTIVITIES ARE COMPLETE. TREES INDICATED FOR MULCHING IN THE TREE INVENTORY SHALL BE MULCHED TO PROTECT THE ROOTS AND RETAIN MOISTURE. HARDWOOD CHIPS OR SHREDDED MULCH SHALL BE APPLIED AT A MAXIMUM DEPTH OF 4 INCHES AROUND THESE SPECIFIC TREES AND ONLY WITHIN 10 FEET OF THE LIMITS OF DISTURBANCE. ADDITIONAL AREAS MAY BE MULCHED AS PART OF THE INVASIVE SPECIES MANAGEMENT, SEE INVASIVE SPECIES MANAGEMENT NOTES, THIS SHEET.
- 5. ALL CONSTRUCTION ACTIVITY BEYOND THE LIMITS OF DISTURBANCE SHOWN ON THE PLAN SHALL BE PROHIBITED UNLESS PREVIOUSLY APPROVED. THE STORAGE OF EQUIPMENT, MATERIALS, CHEMICALS, AND DEBRIS AS WELL AS VEHICULAR TRAFFIC OR THE PARKING OF VEHICLES SHALL NOT BE PERMITTED WITHIN TREE PRESERVATION AREAS.
- 6. THE SERVICES OF THE PROJECT SURVEYOR SHALL BE RETAINED TO HAVE THE LIMITS OF CLEARING AND GRADING IN THE AREAS OF TREE PRESERVATION MARKED WITH A CONTINUOUS LINE OF FLAGGING PRIOR TO THE WALK-THROUGH MEETING WITH THE M-NCPPC DEPARTMENT OF PLANNING FOREST CONSERVATION INSPECTOR AND PARKS DEPARTMENT INSPECTOR TO BE HELD PRIOR TO ANY CLEARING AND GRADING. DURING THE TREE PRESERVATION WALK-THROUGH MEETING, THE PARK URBAN FORESTER SHALL WALK SUCH LIMITS OF CLEARING AND GRADING WITH BOTH INSPECTORS TO DETERMINE WHERE ADJUSTMENTS TO THE CLEARING LIMITS CAN BE MADE TO INCREASE THE AREA OF TREE PRESERVATION AND/OR TO INCREASE THE SURVIVABILITY OF TREES AT THE EDGE OF THE LIMITS OF CLEARING AND GRADING. SUCH ADJUSTMENT SHALL BE IMPLEMENTED; PROVIDED, HOWEVER, THAT NO ADJUSTMENT SHALL BE REQUIRED THAT WOULD AFFECT THE LOCATION AND/OR DESIGN OF THE DEVELOPMENT, INCLUDING A REQUIREMENT FOR ADDITIONAL RETAINING WALLS. TREES WITHIN THE PRESERVATION AREAS THAT ARE IDENTIFIED SPECIFICALLY BY M-NCPPC IN WRITING AS DEAD OR DYING MAY BE REMOVED AS PART OF THE CLEARING OPERATION. ANY TREE THAT IS SO DESIGNATED SHALL BE REMOVED USING A CHAIN SAW AND SUCH REMOVAL SHALL BE ACCOMPLISHED IN A MANNER THAT AVOIDS DAMAGE TO SURROUNDING TREES AND ASSOCIATED UNDERSTORY VEGETATION. IF A STUMP MUST BE REMOVED, THIS SHALL BE DONE USING A STUMP-GRINDING MACHINE IN A MANNER CAUSING AS LITTLE DISTURBANCE AS POSSIBLE TO ADJACENT TREES AND ASSOCIATED UNDERSTORY VEGETATION AND SOIL CONDITIONS.
- 7. THE LIMITS OF CLEARING AND GRADING SHALL BE STRICTLY CONFORMED TO, AS SHOWN ON THE PLAN. SUBJECT TO ALLOWANCES SPECIFIED IN THESE DEVELOPMENT CONDITIONS AND FOR THE INSTALLATION OF FENCES AND/OR UTILITIES AS DETERMINED NECESSARY BY M-NCPPC. IF IT IS DETERMINED NECESSARY TO INSTALL FENCES AND/OR UTILITIES IN AREAS PROTECTED BY THE LIMITS OF CLEARING AND GRADING AS SHOWN ON THE PLAN, THEY SHALL BE LOCATED IN THE LEAST DISRUPTIVE MANNER NECESSARY AS DETERMINED BY M-NCPPC AND THE PARK URBAN FORESTER.
- 8. DURING ANY CLEARING OR TREE/VEGETATION REMOVAL IN THE AREAS ADJACENT TO THE TREE PRESERVATION AREAS. A REPRESENTATIVE OF THE DEVELOPER SHALL BE PRESENT TO MONITOR THE PROCESS AND ENSURE THAT THE ACTIVITIES ARE CONDUCTED AS CONDITIONED AND APPROVED BY M-NCPPC. THE SERVICES OF THE PARK URBAN FORESTER SHALL BE RETAINED TO MONITOR ALL ON-SITE CONSTRUCTION AND DEMOLITION WORK AND TREE PRESERVATION EFFORTS IN ORDER TO ENSURE CONFORMANCE WITH ALL TREE PRESERVATION CONDITIONS, AND M-NCPPC APPROVALS. MONITORING VISITS SHALL BE CONDUCTED WEEKLY DURING E&S INSTALLATION (CLEARING AND GRADING) CONSTRUCTION AND MONTHLY THEREAFTER UNTIL PROJECT COMPLETION.
- 9. ALL TREES SHOWN TO BE PRESERVED ON THE FOREST CONSERVATION PLAN SHALL BE PROTECTED BY TREE PROTECTION FENCE. TREE PROTECTION FENCING OR SUPER SILT FENCING SHALL BE ERECTED AT THE LIMITS OF CLEARING AND GRADING ADJACENT TO THE TREE PRESERVATION AREAS AS SHOWN ON THE PLANS, AS MAY BE MODIFIED BY THE DEVELOPMENT CONDITIONS BELOW. SUPER SILT FENCE ADJACENT TO MAJOR ROOTS OF TREES MAY BE NOTCHED, AS APPROVED, BY THE DPS INSPECTOR IN THE FIELD. ALL TREE PROTECTION FENCING SHALL BE INSTALLED AFTER THE TREE PRESERVATION WALK-THROUGH MEETING BUT PRIOR TO ANY CLEARING AND GRADING ACTIVITIES. THE INSTALLATION OF ALL TREE PROTECTION FENCING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE PARK URBAN FORESTER AND M-NCPPC, AND ACCOMPLISHED IN A MANNER THAT DOES NOT HARM EXISTING VEGETATION THAT IS TO BE PRESERVED.
- 10. SIGNS STATING "TREE PRESERVATION AREA" SHALL BE AFFIXED TO THE TREE PRESERVATION FENCE AT LEAST EVERY 30 FEET. SIGNS SHALL INCLUDE BOTH ENGLISH AND SPANISH AS SHOWN ON DETAIL.
- 11. IN ORDER TO MEET THE REFORESTATION REQUIREMENTS FOR THIS PROJECT, THE COUNTY WILL DEBIT 0.96 ACRES FROM THE REFORESTATION PROGRAM. THE REFORESTATION SITE LOCATION IS GREAT SENECA CREEK REFORESTATION SITE, PARCEL NUMBER 358, LOCATED AT 15813 DARNESTOWN ROAD, DARNESTOWN, MARYLAND

# INVASIVE SPECIES NOTES

- 1. ALL WORK MUST BE PERFORMED BY A STATE LICENSED PESTICIDE APPLICATOR, UNDER THE SUPERVISION OF A MARYLAND REGISTERED FORESTER OR OTHER QUALIFIED PROFESSIONAL WITH A SUFFICIENT EDUCATION AND EXPERIENCE IN INVASIVE SPECIES AND INTEGRATED PEST MANAGEMENT TECHNIQUES.
- 2. CONTRACTOR MUST OBTAIN ALL PERMITS REQUIRED.
- 3. AN INTEGRATED PEST MANAGEMENT (IPM) PLAN SPECIFICALLY FOR INVASIVE SPECIES SHALL BE SUBMITTED TO AND APPROVED BY M-NCPPC. THIS PLAN WILL INCLUDE AREAS OF TREATMENT, TECHNIQUES, AND TYPES AND QUANTITIES OF HERBICIDES TO BE APPLIED. TECHNIQUES MAY INCLUDE A COMBINATION OF HAND OR SMALL MECHANICAL VEGETATION REMOVAL, MULCHING, AND THE APPLICATION OF HERBICIDE. SMALL MACHINERY REFERS TO ANY PIECE OF EQUIPMENT THAT CAN EASILY BE CARRIED IN AND OUT OF THE FOREST CONSERVATION AREAS SUCH AS A WEED TRIMMER OR CHAINSAW. ANYTHING LARGER THAN A SMALL MACHINE REQUIRES THE APPROVAL OF M-NCPPC.
- 4. AREAS WITHIN THE LOD SHOULD BE CUT TO THE GROUND AND CLEARED OF ALL VEGETATIVE MATERIAL. OUTSIDE OF LOD (A MAXIMUM ADDITIONAL DISTANCE OF 50 FEET), THE CLEARING SHOULD BE DONE MANUALLY (MACHETE, WEED TRIMMER, OR CHAINSAW) UNDER THE SUPERVISION OF M-NCPPC STAFF. REGROWTH OF INVASIVES SHALL BE TREATED BY HERBICIDE APPLICATION. SEE INVASIVE REMOVAL SPECIFICATION FOR DETAILS OF TYPE AND STRENGTH OF HERBICIDE. THE SPRAYING MUST BE DONE UNDER THE SUPERVISION OF M-NCPPC. REMOVAL MAY REQUIRE THREE APPLICATIONS OF HERBICIDE.
- 5. 6 TO 8 INCHES OF MULCH MAY BE APPLIED TO AREAS WITH HEAVILY ESTABLISHED INVASIVE SPECIES AFTER THE AREA HAS BEEN TREATED APPROPRIATELY WITH EITHER HAND REMOVAL OR HERBICIDE. THIS MULCHING SHOULD OCCUR 72 HOURS AFTER THE LAST HERBICIDE APPLICATION.
- 6. IN THE VICINITY OF WATER, FOLLOW THE HERBICIDE'S LABELED INSTRUCTIONS. AN HERBICIDE DESIGNED TO BE USED IN THE VICINITY OF WATER MAY BE REQUIRED (IE. RODEO).
- 7. THE USE OF A QUALITY SURFACTANT WITH HERBICIDES IS RECOMMENDED FOR IMPROVED CONTROL. SEE HERBICIDE LABEL.
- 8. READ AND FOLLOW THE PRODUCT LABEL FOR RATES ON THE HERBICIDES.
- 9. ALL PRODUCT LABELS AND MATERIAL SAFETY DATA SHEETS (MSDS) SHALL BE ON-SITE DURING ANY APPLICATION OF HERBICIDES.
- 10. ALL PLANTS ON THE MARYLAND DEPARTMENT OF NATURAL RESOURCES EXOTIC AND INVASIVE SPECIES LIST SHALL BE ERADICATED FROM ALL AREAS WITHIN THE LOD AND A MAXIMUM ADDITIONAL DISTANCE OF 50 FEET BEYOND THE LOD INTO THE FOREST CONSERVATION AREAS.
- 11. INDIVIDUALS INVOLVED IN INVASIVE PLANT REMOVAL MUST MEET WITH M-NCPPC PARKS DEPARTMENT STAFF AND PLANNING DEPARTMENT FOREST CONSERVATION INSPECTOR ON-SITE FOR A PRE-WORK MEETING PRIOR TO VEGETATION REMOVAL, MULCHING, OR HERBICIDE APPLICATION.
- 12. THE CONTRACTOR MUST FOLLOW ALL MARYLAND DEPARTMENT OF AGRICULTURE RULES AND REGULATIONS REGARDING THE SPRAYING OF HERBICIDES. ANY HERBICIDES USED IN THE REMOVAL OF EXOTIC INVASIVE PLANTS MUST BE APPLIED BY A MARYLAND LICENSED PESTICIDE APPLICATOR.
- 13. CONTRACTOR MUST NOTIFY M-NCPPC STAFF 48 HOURS PRIOR TO SPRAYING.
- 14. HERBICIDE USE GUIDE

Generic Name	Brands/Manufacturer	Comments				
Triclopyr salt	Garlon 3A  Dow AgroSciences  44.4% active ingredient	Dicot-specific (will not kill grasses); can be used for foliar, cut surface, basal bark treatments SAFE FOR USE OVER OR NEAR				
		WATER				
Triclopyr ester	Garlon 4	Dicot-specific (will not kill				
	Dow AgroSciences	grasses); can be used for foliar, cut surface, basal bark				
	61.6% active ingredient	treatments				
		DO NOT USE OVER OR NEAR WATER				
Triclopyr ester	Pathfinder II	A ready-to-use product				
	Dow Agro Sciences	formulated for cut stem or basal bark treatments.				
	13.6% active ingredient	Saddi Suin ((Subjicities)				
lyphosate w/	Roundup Original	Non-selective (will kill all				
surfactant	Roundup Original II	vegetation); can be used for				
	Roundup Pro	foliar, cut surface, basal bark treatments				
	Monsanto Company all are 41% active ingredients	DO NOT USE OVER OR NEAR WATER				
	Read the label for Generic versions, % active ingredient varies.	WATER				
Glyphosate w/o	Rodeo	Non-selective (will kill all				
surfactant	Dow AgroSciences	vegetation); can be used for foliar and cut surface				
	53.8% active ingredient	treatments				
	Aqua Neat	SAFE FOR USE OVER OR NEAR				
	Riverdale	WATER				
	53.8% active ingredient					

15. CONTRACTOR TO REFER TO PUBLICATION FROM M-NCPPC DEPARTMENT OF PARKS PUBLICATION, Best Management Practices for Control of Non-Native Invasive Plants, April, 2020.

# STANDARD TREE CANOPY NOTES

ANY SHADE TREE PLANTED TO COMPLY WITH CHAPTER 55 OF THE COUNTY CODE MUST CONFORM TO THE FOLLOWING: 1. EACH SHADE TREE MUST MEET THE REQUIREMENTS FOR PLANT MATERIAL IN ANSI Z60.1;

- 2. EACH SHADE TREE MUST BE A MINIMUM OF 2" CALIPER:
- 3. INSTALLATION OF EACH SHADE TREE MUST MEET ALL REQUIREMENTS OF ANSI A300:
- 4. AT THE TIME OF PLANTING:
- a. TREE GUARDS TO PROTECT TREES FROM DEER RUBBING, MOWERS, WEED EATERS, OTHER EQUIPMENT AND LARGE RODENTS MUST BE INSTALLED ON ALL SHADE TREES;
  - b. MULCH MUST BE APPLIED;
  - c. SUFFICIENT WATER MUST BE APPLIED TO AID IN PROPER PLANTING.
- 5. SHADE TREES MUST BE INSTALLED BETWEEN OCTOBER 15TH AND MAY 15TH AS LONG AS THE GROUND IS NOT FROZEN, SATURATED, OR COVERED WITH SNOW SUCH THAT A SUITABLE HOLE CANNOT BE DUG;
- 6. SHADE TREES MUST NOT BE INSTALLED BETWEEN MAY 16TH AND OCTOBER 14TH OF EACH YEAR. IF INSTALLATION CANNOT OCCUR BETWEEN OCTOBER 15TH AND MAY 15TH FOR ANY REASON, OR IF PROPOSED TREES ARE NOT PLANTED FOR ANY OTHER REASON, THE PERMITTEE MUST PAY THE REQUIRED FEE IN LIEU.
- 7. IF SHADE TREES ARE INSTALLED PRIOR TO FINAL STABILIZATION OF THE LAND DISTURBING ACTIVITY THEN NO ADDITIONAL DISTURBANCE MUST OCCUR WITHIN FIVE FEET OF THE STEM OF THE TREE. PROTECTIVE FENCING MUST BE INSTALLED AT THE EDGE OF THIS AREA AT THE SAME TIME THE TREE IS INSTALLED AND MUST REMAIN IN PLACE UNTIL FINAL STABILIZATION OCCURS.
- 8. THE LOCATION OF GROWING ZONES AND PLANTING AREAS MUST BE CLEARLY MARKED IN THE FIELD PRIOR TO INSTALLATION OF ANY SHADE TREE.
- 9. A COPY OF THE APPROVED SEDIMENT CONTROL PLAN SHOWING ALL APPROVED GROWING ZONES AND PLANTING AREAS MUST BE AVAILABLE ON THE SITE AT ALL TIMES.
- 10. AT LEAST ONE INSPECTION MUST OCCUR AFTER ALL CONSTRUCTION ACTIVITIES ARE COMPLETED TO DETERMINE THE LEVEL OF COMPLIANCE WITH SHADE TREE PLANTING REQUIREMENTS.

# INSPECTIONS NOTES

APPROVED

REVISION

Chief, Division of Transportation Engineering

Designed by: SBD Drawn by: SBD Checked by: SJR

- 1. ALL FIELD INSPECTIONS MUST BE REQUESTED BY THE APPLICANT. INSPECTIONS MUST BE CONDUCTED AS
  - a. AFTER THE LIMITS OF DISTURBANCE HAVE BEEN STAKED AND FLAGGED, BUT BEFORE ANY CLEARING OR **GRADING BEGINS**
  - b. AFTER NECESSARY STRESS REDUCTION MEASURES HAVE BEEN COMPLETED AND PROTECTION MEASURES HAVE BEEN INSTALLED, BUT BEFORE ANY CLEARING AND GRADING BEGIN
  - c. AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITIES, BUT BEFORE REMOVAL OF TREE PROTECTION FENCING, TO DETERMINE THE LEVEL OF COMPLIANCE WITH THE PROVISION OF THE FOREST CONSERVATION.
  - d. BEFORE THE START OF ANY REQUIRED REFORESTATION AND AFFORESTATION PLANTING
  - e. AFTER THE REQUIRED REFORESTATION AND AFFORESTATION PLANTING HAS BEEN COMPLETED TO VERIFY THAT THE PLANTING IS ACCEPTABLE AND PRIOR TO THE START OF THE MAINTENANCE PERIOD.
  - f. AT THE END OF THE MAINTENANCE PERIOD TO DETERMINE THE LEVEL OF COMPLIANCE WITH THE PROVISIONS OF THE PLANTING PLAN AND, IF APPROPRIATE, RELEASE OF THE PERFORMANCE BOND.

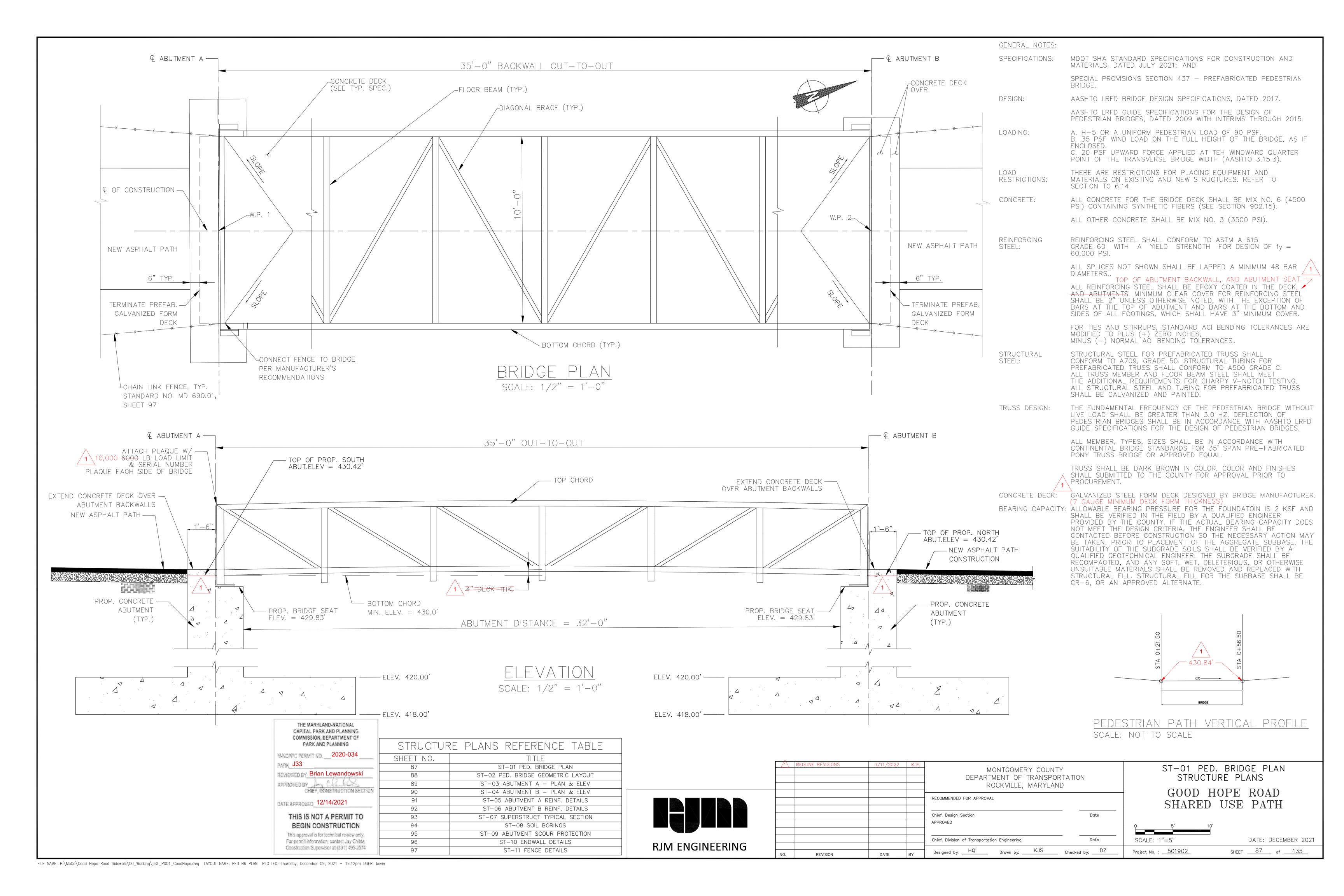


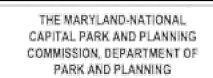
THE MARYLAND-NATIONAL

Construction Supervisor at (301) 495-2574 MONTGOMERY COUNTY LS-09 LANDSCAPE NOTE SHEET DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND GOOD HOPE ROAD RECOMMENDED FOR APPROVAL SHARED USE PATH REFER TO TITLE SHEET FOR SIGNATURES Chief, Design Section REFER TO TITLE SHEET FOR SIGNATURES

DATE: DECEMBER 2021 SCALE: 1"=30' Project No. : <u>501902</u> SHEET <u>86</u> of <u>135</u>







MANCEPEC FERMIT NO. \_\_\_\_\_ 2020-034 \_\_\_

PARK J33

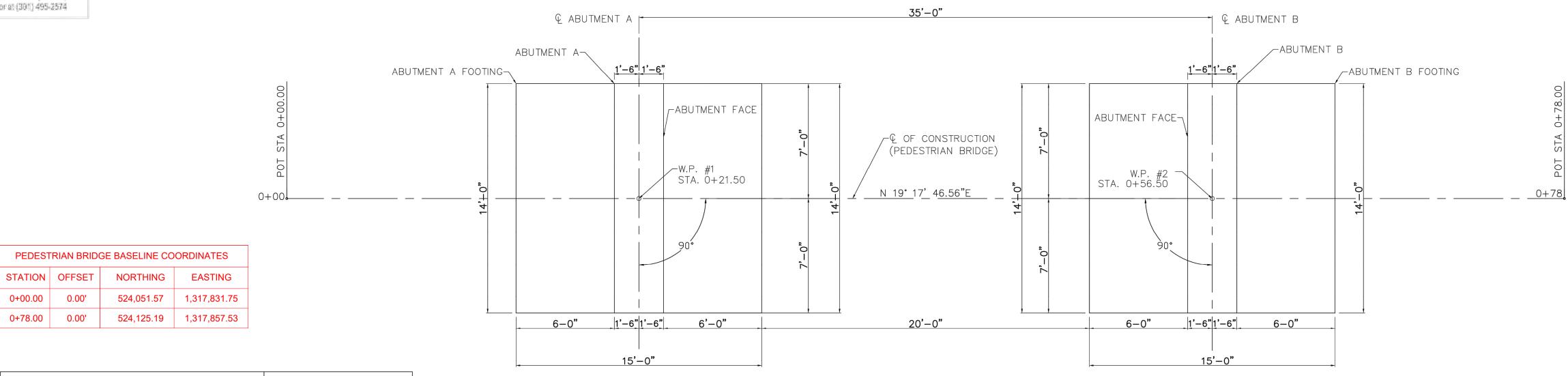
REVIEWED BY Brian Lewandowski APPROVED BY CHIEF, CONSTRUCTION SECTION

DATE APPROVED 12/14/2021

#### THIS IS NOT A PERMIT TO BEGIN CONSTRUCTION

This approval is for technical review only. For people information, contest Jay Childs, Construction Supervisor at (361) 495-2574





PE	EDESTRIAN E	GOOD HOPE R	OAD BASELINE			
POINT#	Northing	Easting	STATION	OFFSET	STATION	OFFSET
1	524071.86	1317838.85	0+21.50	0.00'	27+10.61	23.27' L
2	524104.89	1317850.42	0+56.50	0.00'	27+46.30	23.04' L

PEDESTRIAN BRIDGE BASELINE COORDINATES

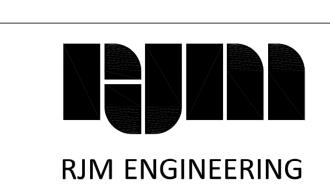
STATION OFFSET NORTHING EASTING

0+00.00 0.00'

GOOD HOPE ROAD BASELINE

28+00

GEOMETRIC LAYOUT PLAN SCALE: 1/4" = 1'-0"

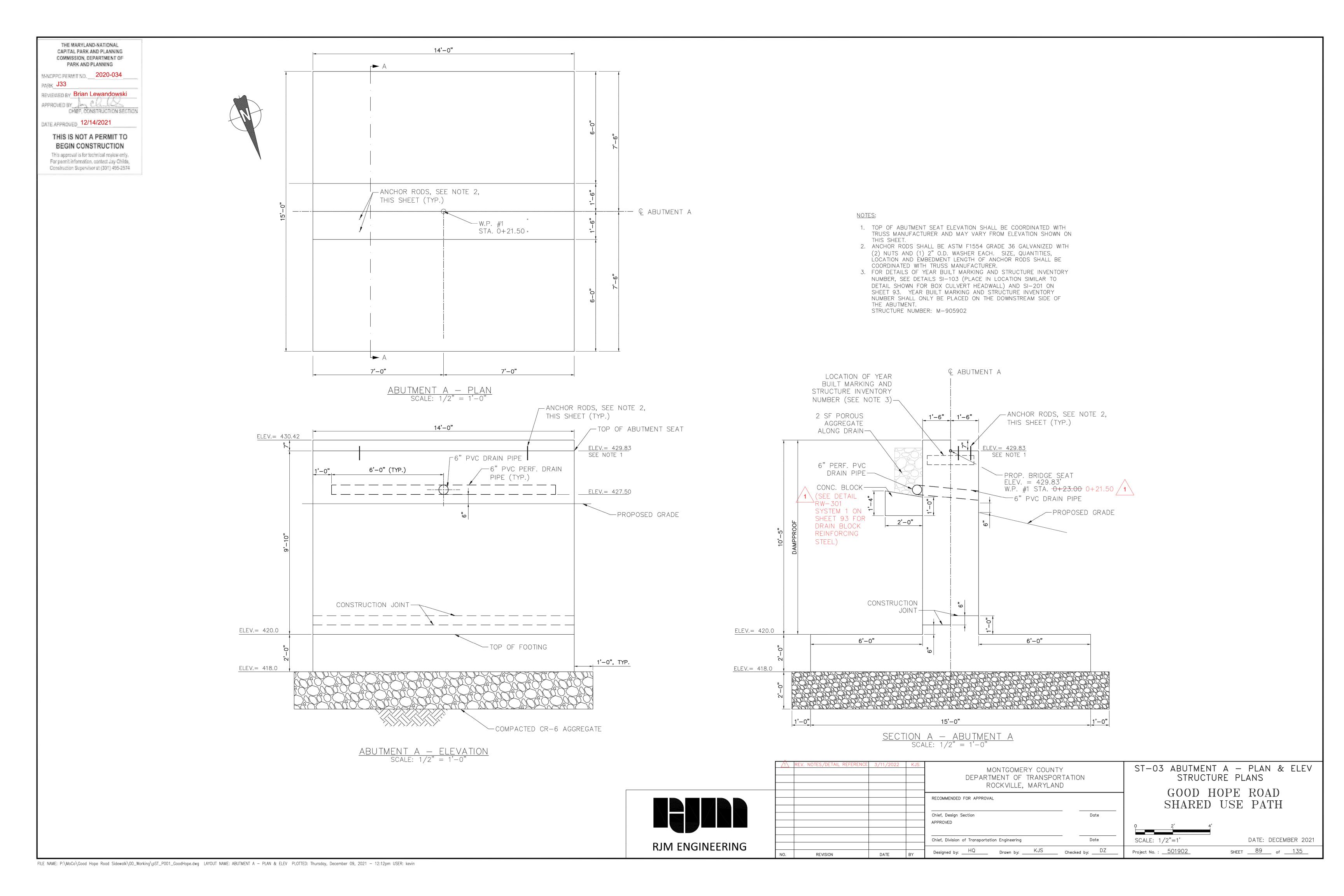


1	ADDED COORDINATES	3/11/2022	KJS	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND	
				RECOMMENDED FOR APPROVAL  Chief, Design Section Date APPROVED	
NO.	REVISION	DATE	BY	Chief, Division of Transportation Engineering  Date  Designed by: HQ Drawn by: KJS Checked by: DZ	

ST-02 PED. BRIDGE GEOMETRIC LAYOUT STRUCTURE PLANS GOOD HOPE ROAD SHARED USE PATH DATE: DECEMBER 2021

SHEET <u>88</u> of <u>135</u>

Project No. : <u>501902</u>



THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION, DEPARTMENT OF PARK AND PLANNING

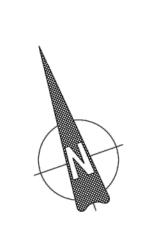
MARCEPC FERMIT NO. \_\_\_\_ 2020-034 PARK J33

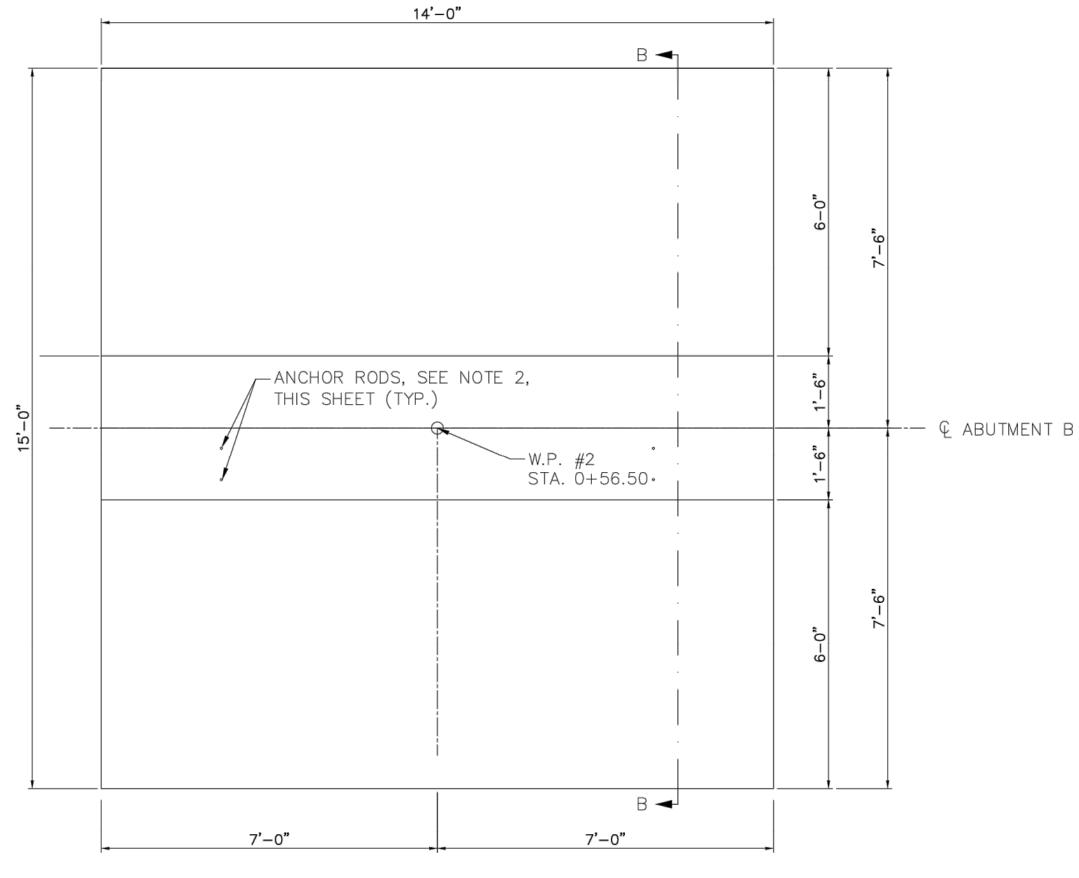
Brian Lewandowski APPROVED BY CHIEF, CONSTRUCTION SECTION

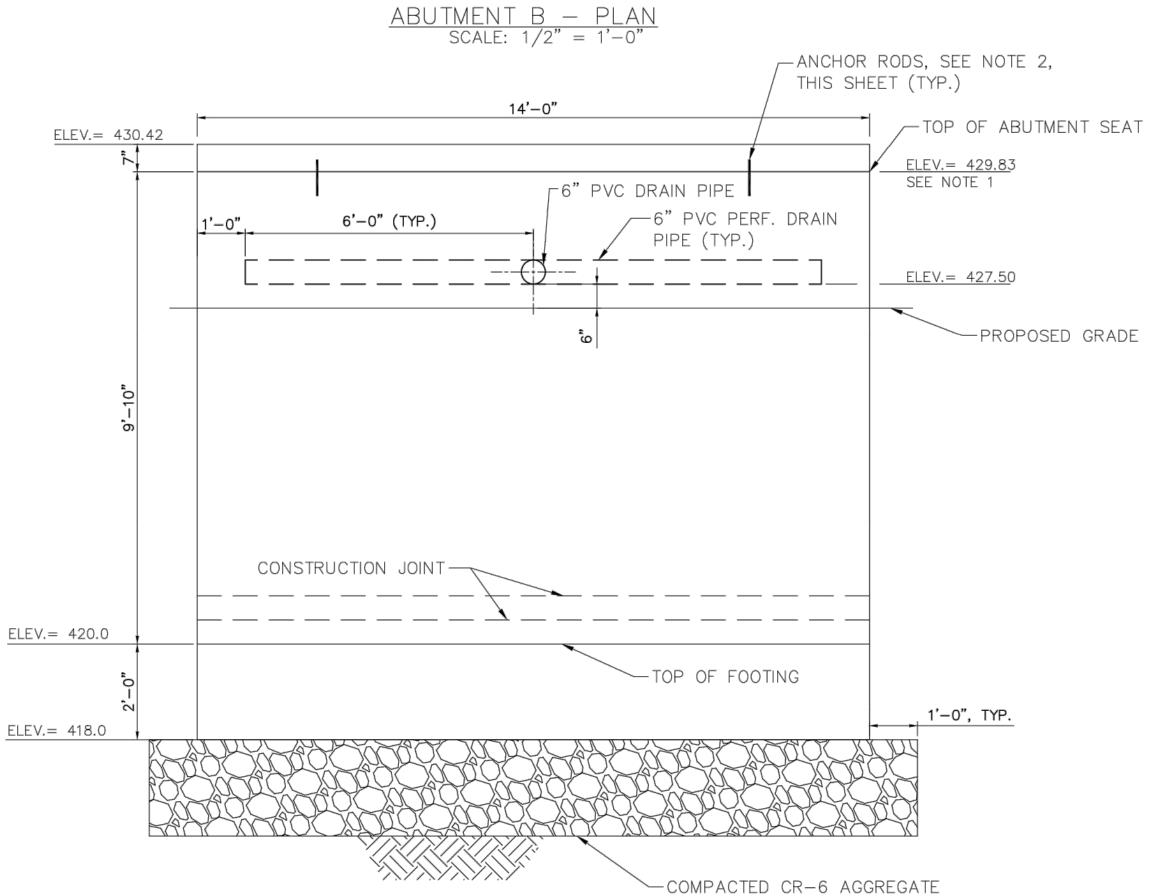
DATE APPROVED 12/14/2021

#### THIS IS NOT A PERMIT TO BEGIN CONSTRUCTION

This approval is for technical review only. For pertil information, contact Jay Childs, Construction Supervisor at (381) 495-2574





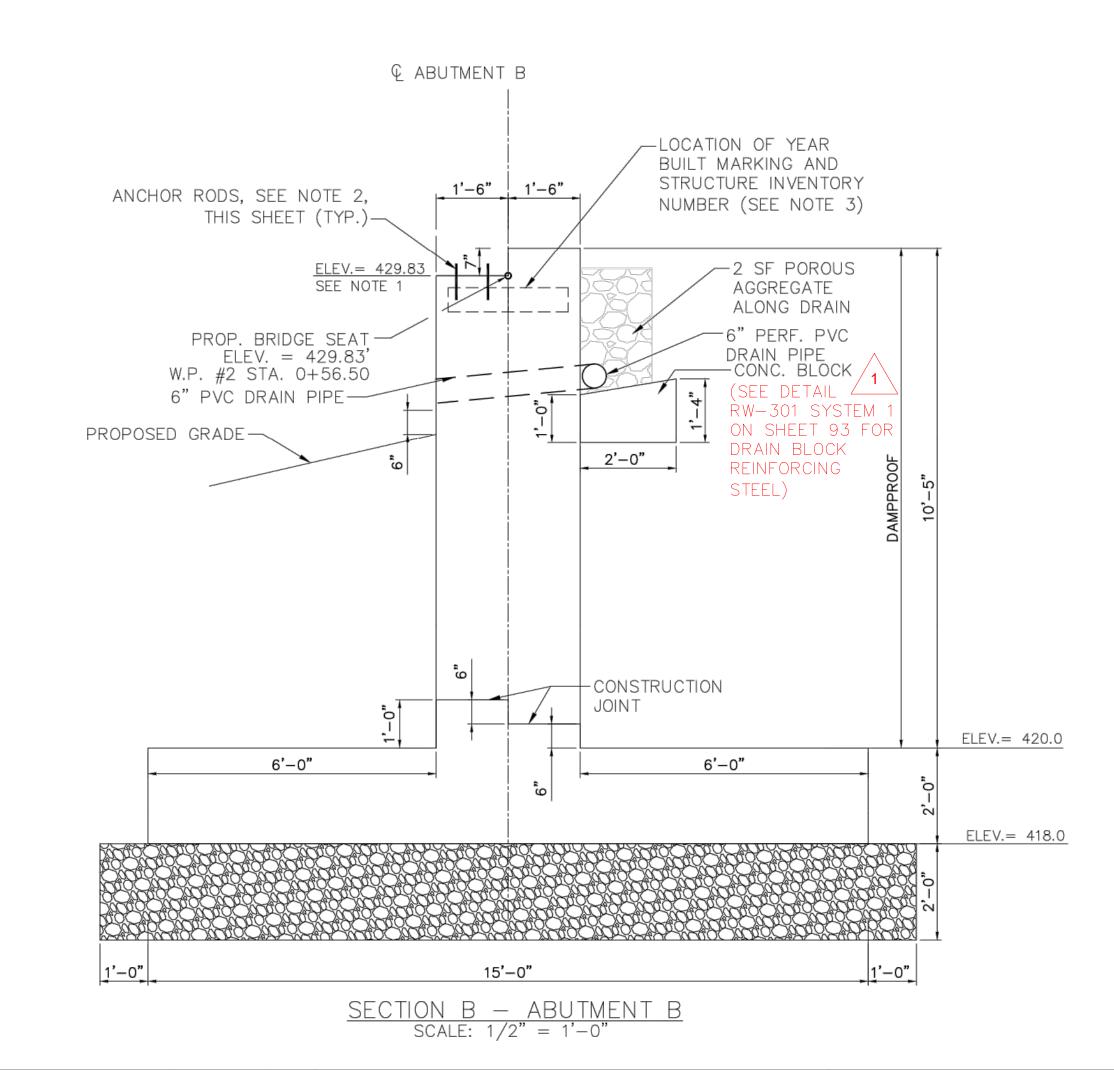


RJM ENGINEERING

ABUTMENT B — ELEVATION SCALE: 1/2" = 1'-0"

#### NOTES:

- 1. TOP OF ABUTMENT SEAT ELEVATION SHALL BE COORDINATED WITH TRUSS MANUFACTURER AND MAY VARY FROM ELEVATION SHOWN ON THIS SHEET.
- 2. ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 GALVANIZED WITH (2) NUTS AND (1) 2" O.D. WASHER EACH. SIZE, QUANTITIES, LOCATION AND EMBEDMENT LENGTH OF ANCHOR RODS SHALL BE COORDINATED WITH TRUSS MANUFACTURER.
- 3. FOR DETAILS OF YEAR BUILT MARKING AND STRUCTURE INVENTORY NUMBER, SEE DETAILS SI-103 (PLACE IN LOCATION SIMILAR TO DETAIL SHOWN FOR BOX CULVERT HEADWALL) AND SI-201 ON SHEET 93. YEAR BUILT MARKING AND STRUCTURE INVENTORY NUMBER SHALL ONLY BE PLACED ON THE DOWNSTREAM SIDE OF THE ABUTMENT. STRUCTURE NUMBER: M-905902



MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL Chief, Design Section APPROVED Chief, Division of Transportation Engineering Designed by: HQ Drawn by: KJS Checked by: DZ

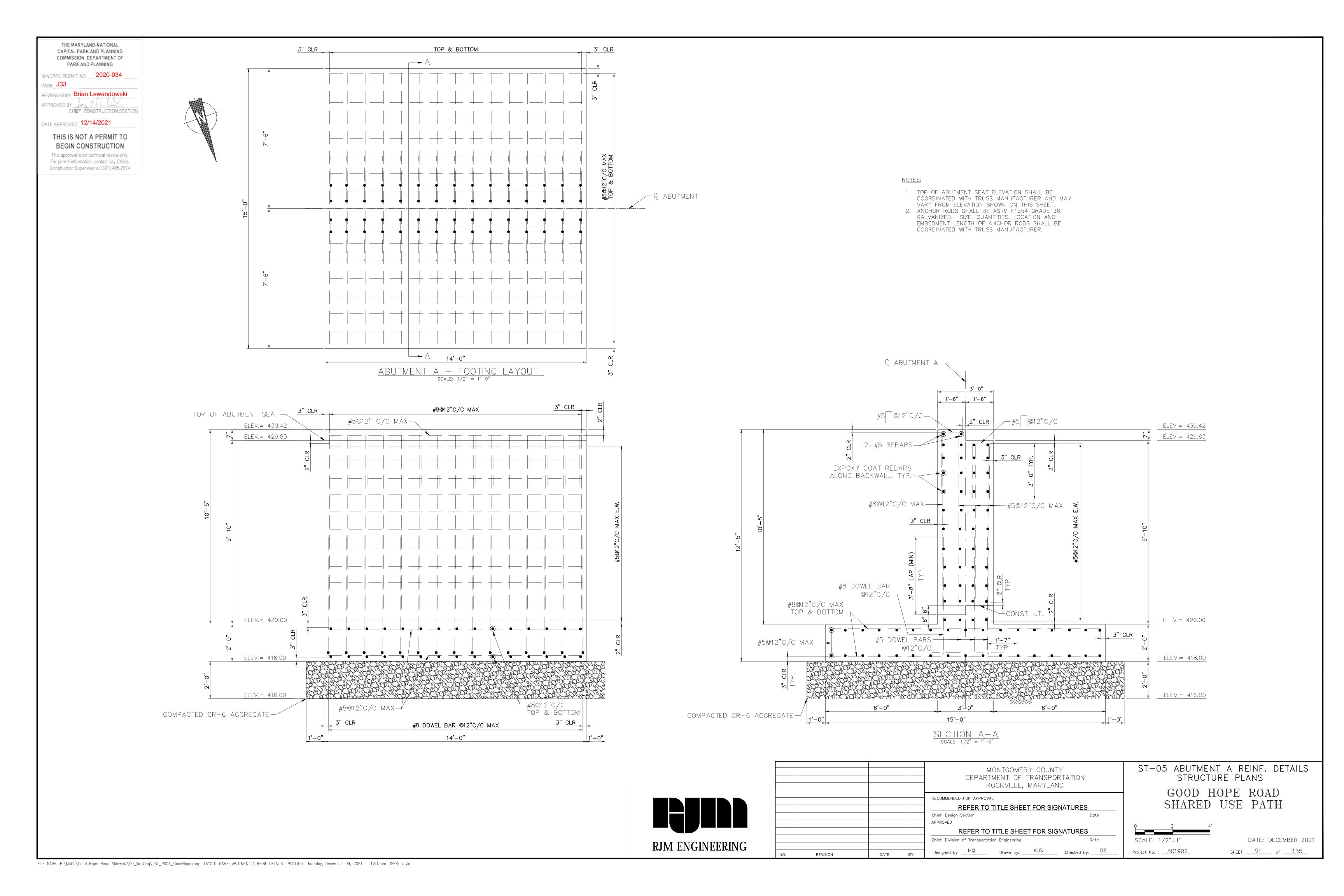
DATE

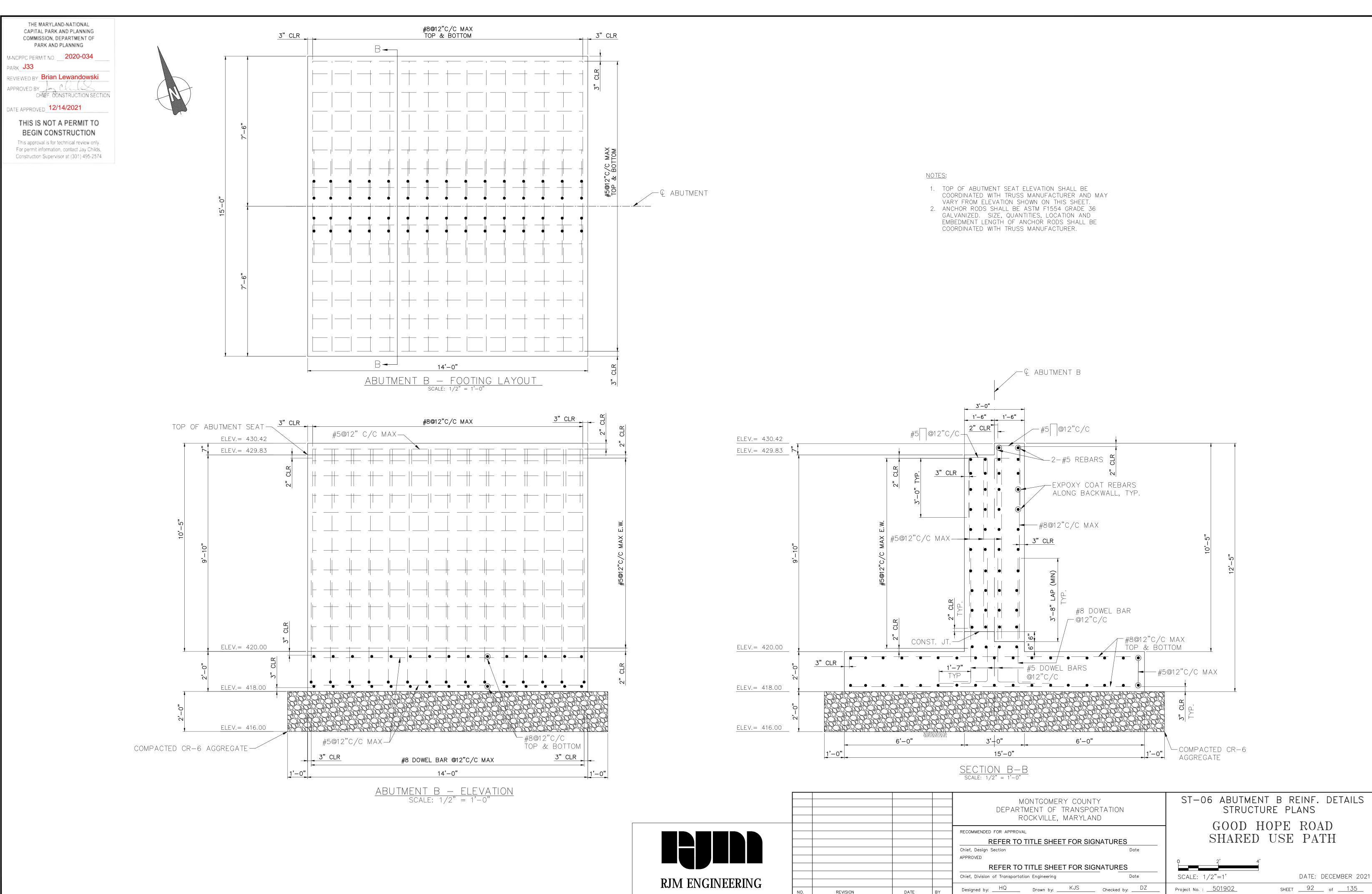
REVISION

ST-04 ABUTMENT B - PLAN & ELEV STRUCTURE PLANS GOOD HOPE ROAD SHARED USE PATH

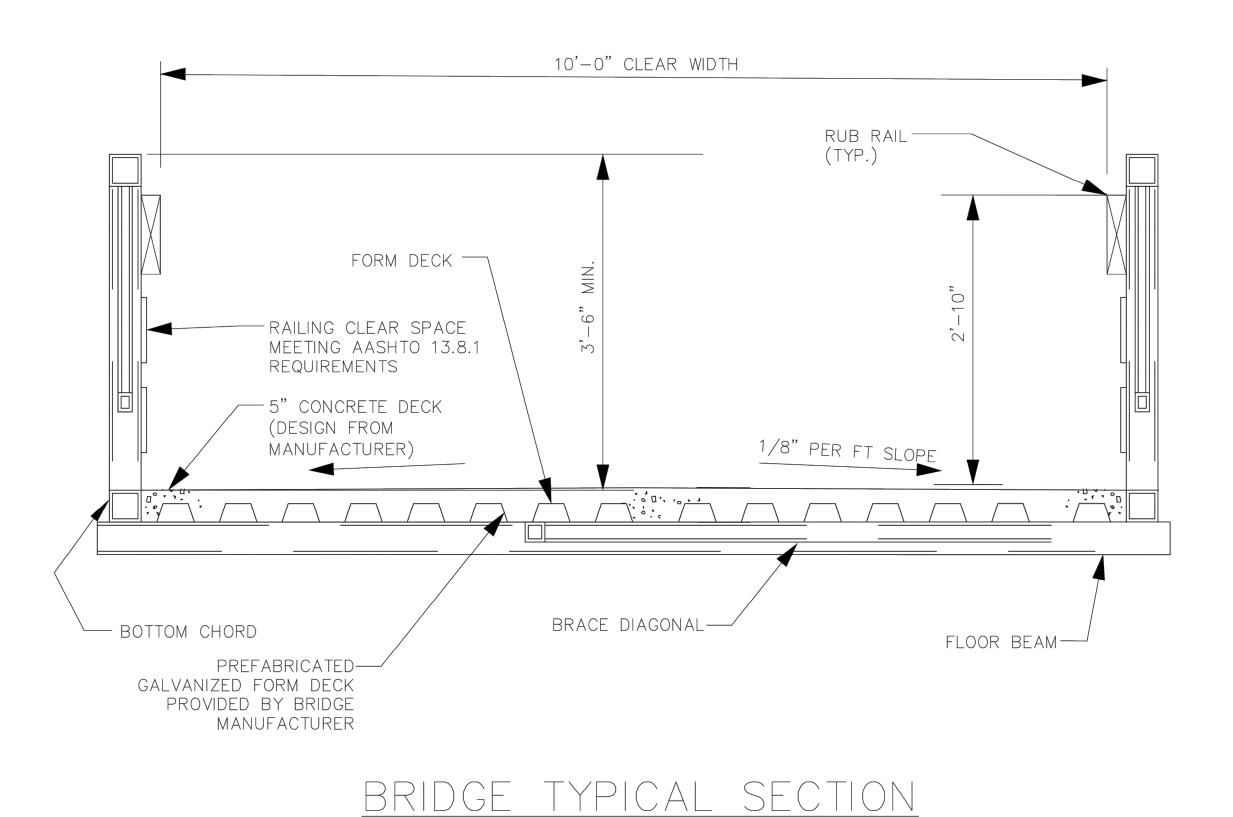
DATE: DECEMBER 2021 SHEET 90 of 135 Project No. : <u>501902</u>

FILE NAME: P:\MoCo\Good Hope Road Sidewalk\00\_Working\pST\_P001\_GoodHope.dwg LAYOUT NAME: ABUTMENT B - PLAN & ELEV PLOTTED: Thursday, December 09, 2021 - 12:12pm USER: kevin

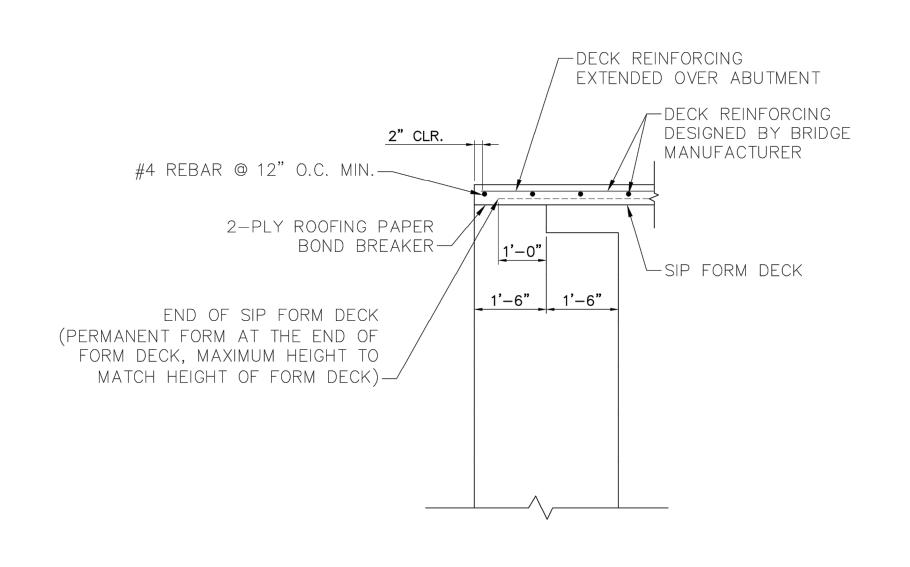




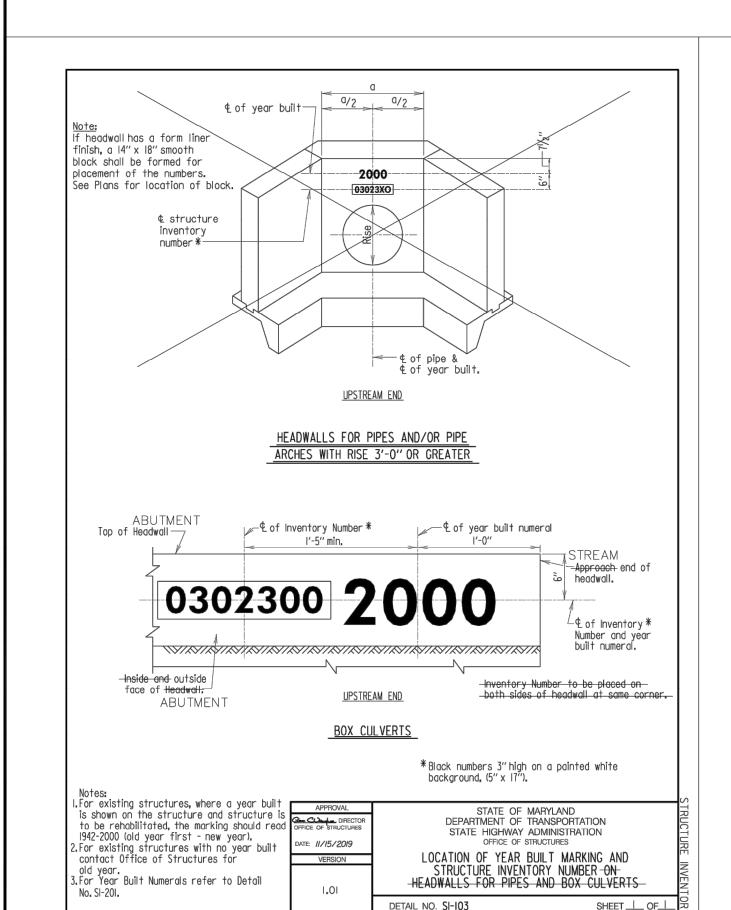


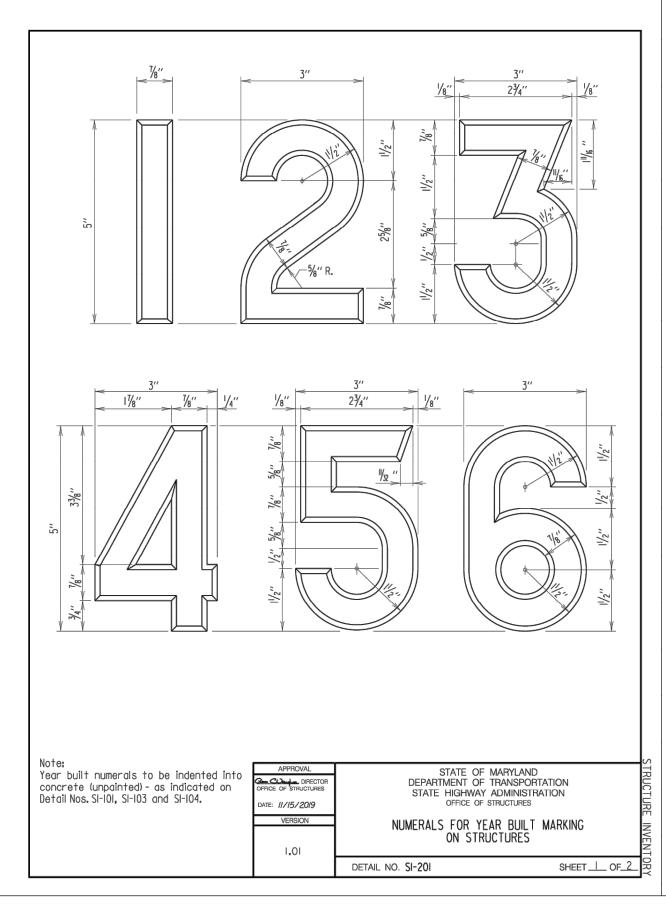


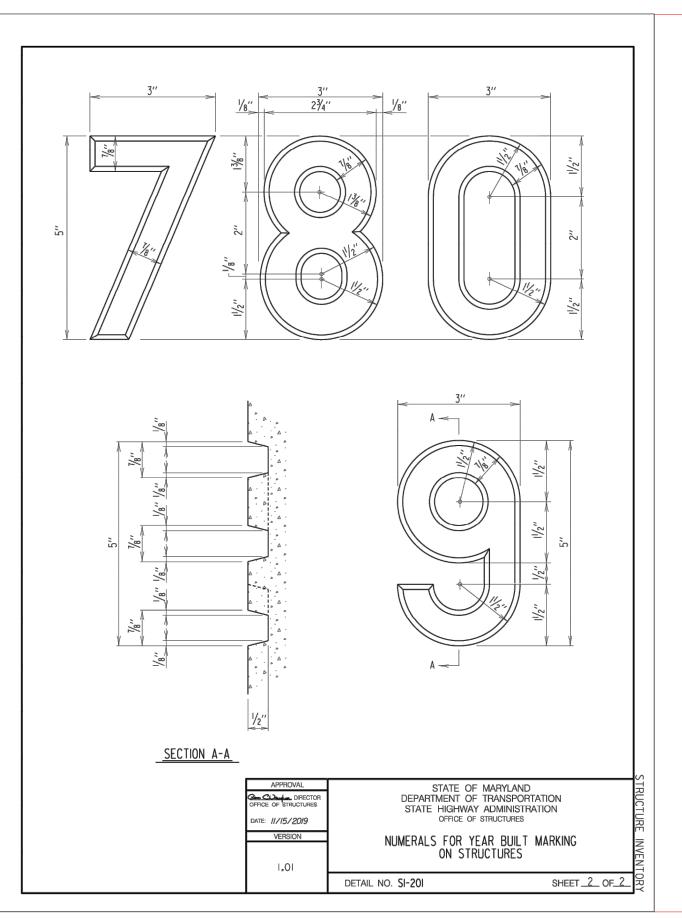
SCALE: 1" = 1'-0"

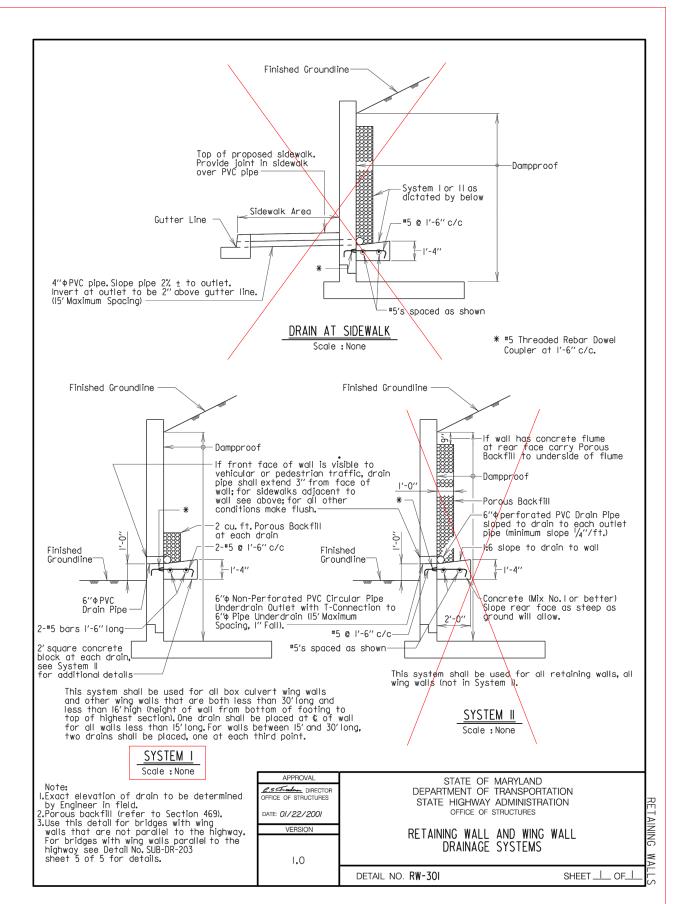


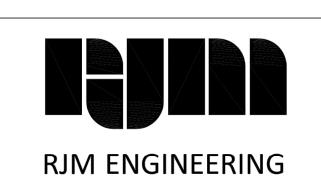
# CONCRETE DECK OVER DETAIL NOT TO SCALE











1	ADDED STANDARD DETAIL	3/11/2022	KJS	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORT ROCKVILLE, MARYLAND	
				RECOMMENDED FOR APPROVAL  Chief, Design Section  APPROVED	 Date
NO.	REVISION	DATE	BY	Chief, Division of Transportation Engineering  Designed by: HQ Drawn by: KJS	Date  Checked by: DZ

ST-07 SUPERSTRUCT TYPICAL SECTION STRUCTURE PLANS

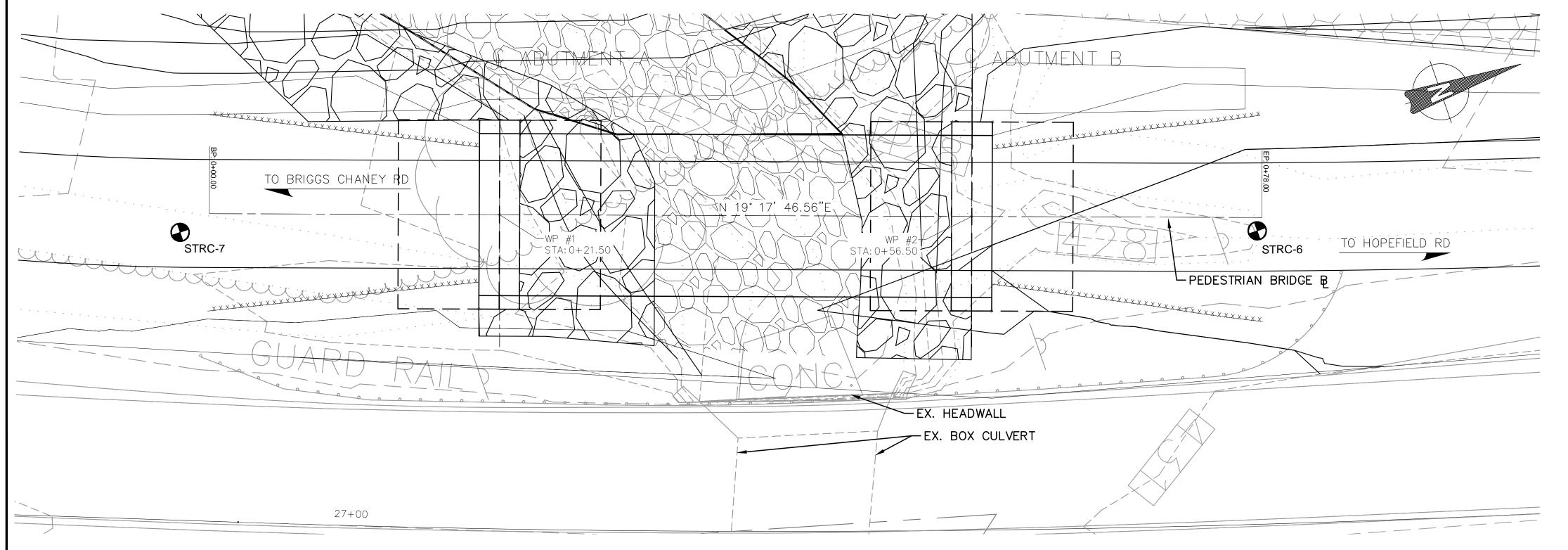
GOOD HOPE ROAD SHARED USE PATH

 SCALE: AS NOTED
 DATE: DECEMBER 2021

 Project No. : 501902
 SHEET 93 of 135

		n, Mirmiran & Thompson, Inc.								
		<b>EER</b> G18035 <b>COMPLETED</b> 2/19/19				Silver Spri			: CI7E 6"	
		RACTOR Kim Engineering Inc.						HOLE	. SIZE _0	
		OD H.S.A					ft			
LOGO	SED BY J.	C. CHECKED BY K.B								
NOTE	s		<u>√</u> 24	hrs AFTE	R DRI	LLING 3.	7 ft			
				Д.,	% /	ATS	z.	∀	▲ SPT N VALUE ▲	
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	UNIT WT. (pcf)	PL MC LL	
HO.	GRA L	WW. L. W. E. B. E. S. K. H. H. S. K.		MPL	S S S	) NO NO NO	) CKE	DRY U	☐ FINES CONTENT (%) ☐	
				√S	8	BL	PC	ä	20 40 60 80	
_		inch Topsoil. LL		SS 1	67	2-3-5 (8)			<b> </b>	
-	<b>⋙</b> В	rown, black, gray, moist, silty SAND (SM) with varying amo	ounts	, v .		\-/				
-	W 7			SS 2	67	2-1-2 (3)				
5				Y 1 -		(9)	1			
	B	rown, gray, reddish brown, moist to wet, loose to medium ense, silty SAND (SM) with mica and varying amounts of g	ıravel	SS 3	78	2-4-24 (28)				
_		ones, only of the (em) with fines and varying amounts of g	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	/ \ 3		(20)				
-				√ ss	44	8-11-7	1			
-				<b>/\ 4</b>		(18)	-			
10		ADDDOV FOOTING FLEVAT		SS 5	67	3-4-4	-			
			ION	/\ 5		(8)	-		IT : : : : : :	
_										
. <u>-</u>				√ ss	67	3-3-3				
15_				6		(6)	-			
-										
_										
-				SS 7	78	3-5-5				
20				7	"	(10)	-			
-										
_										
_				SS 8	56	16-12-8	-			
25				8	30	(20)	-			
-										
-										
				√ ss	00	9-12-15	-			
30		Bottom of hole at 30.0 feet.		SS 9	22	(27)	-		<b>A</b>	
		douloff of note at 30.0 feet.								

		KIM ENGINEERING, INC. Consulting Geotechinical Engineers Beltsville, Maryland	DDA IEA	TNAME	Casa	N Hono Dr-	م المد	FO) /	ont			
		hnson, Mirmiran & Thompson, Inc.				з норе коа Silver Sprir			ent			
		RTED 2/19/19 COMPLETED 2/19/19							SIZE 6"			
		CONTRACTOR Kim Engineering Inc.										
		METHOD H.S.A										
LOGG	ED B	Y J.C. CHECKED BY K.B	<b>▼</b> AT	END OF	DRILL	ING 3.8 ft						
NOTE	s		<u>V</u> 24	hrs AFTE	R DRI	LLING _3.1	ft					
				Д	%	TS	ż	H	<b>▲</b> SI	PT N VAL	JE ▲	
Ē(	GRAPHIC LOG			SAMPLE TYPE NUMBER	RECOVERY 9 (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	UNIT WT. (pcf)	PL	MC	LL	
DEPTH (ft)	NA S	MATERIAL DESCRIPTION		APLE NUM	88	N A A	CKE)	58		S CONTE	-	
				SAN	\bar{\bar{\bar{\bar{\bar{\bar{\bar{\bar	BLO ()	PO	DRY				
	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	6 inch Topsoil.		√ ss	EC	1-1-1				40 60	80	
		FILL Brown, black, dark brown, sandy SILT (ML) with traces of cl	av	1	56	(2)						
		organics and mica.  Brown, gray, moist, soft, sandy SILT (ML) with traces of clay		√ ss		2-2-2					:	
			y and	2	67	(4)			<b> </b>			
5		B	1-			_					:	
		Brown, gray, reddish brown, light brown, moist to wet, loose	to ica	SS 3	67	5-2-3 (5)			<b> </b>		:	
		and gravel.		V V		. ,						
				SS 4	67	16-13-12					:	
				/ \ 4		(25)						
10				√ ss	6	4-4-5			\ \cdot \cdo	: :	:	
		APPROX. FOOTING ELEVATI	ION	<u> </u>	•	(9)			<b> </b>			
				\/ ss		2-4-4						
15				SS 6	11	(8)			<b>↑</b>			
-									\			
									\:	: :	:	
				SS 7	56	6-10-9 (19)			\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
20				,		(10)				: :	:	
-												
_												
				√ ss	70	6-8-12					:	
25				SS 8	78	(20)					:	
30				SS 9	78	6-12-13 (25)						
_ 50 _	14606.0	Bottom of hole at 30.0 feet.		V 1 -		(/					:	
											:	



BORING LOCATION PLAN

1" = 5'

### NOTES:

- 1. THE BORINGS AND DRIVE TESTS WERE TAKEN ON FEBRUARY 2, 2019 BY KIM ENGINEERING, INC.
- 2. THE INFORMATION PROVIDED IN THE BORING LOGS IS TRUE AND ACCURATE SOLELY FOR THE SPECIFIC LOCATIONS FOR WHICH BORINGS WERE DRILLED AND SOIL PROPERTIES WERE ANALYZED. THE BORING LOGS ARE PRESENTED FOR INFORMATIONAL PURPOSES ONLY.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION, DEPARTMENT OF PARK AND PLANNING

M-NCPPC PERMIT NO. \_\_\_ 2020-034

PARK J33

REVIEWED BY Brian Lewandowski APPROVED BY CONSTRUCTION SECTION

DATE APPROVED 12/14/2021

THIS IS NOT A PERMIT TO BEGIN CONSTRUCTION

This approval is for technical review only. For permit information, contact Jay Childs, Construction Supervisor at (301) 495-2574

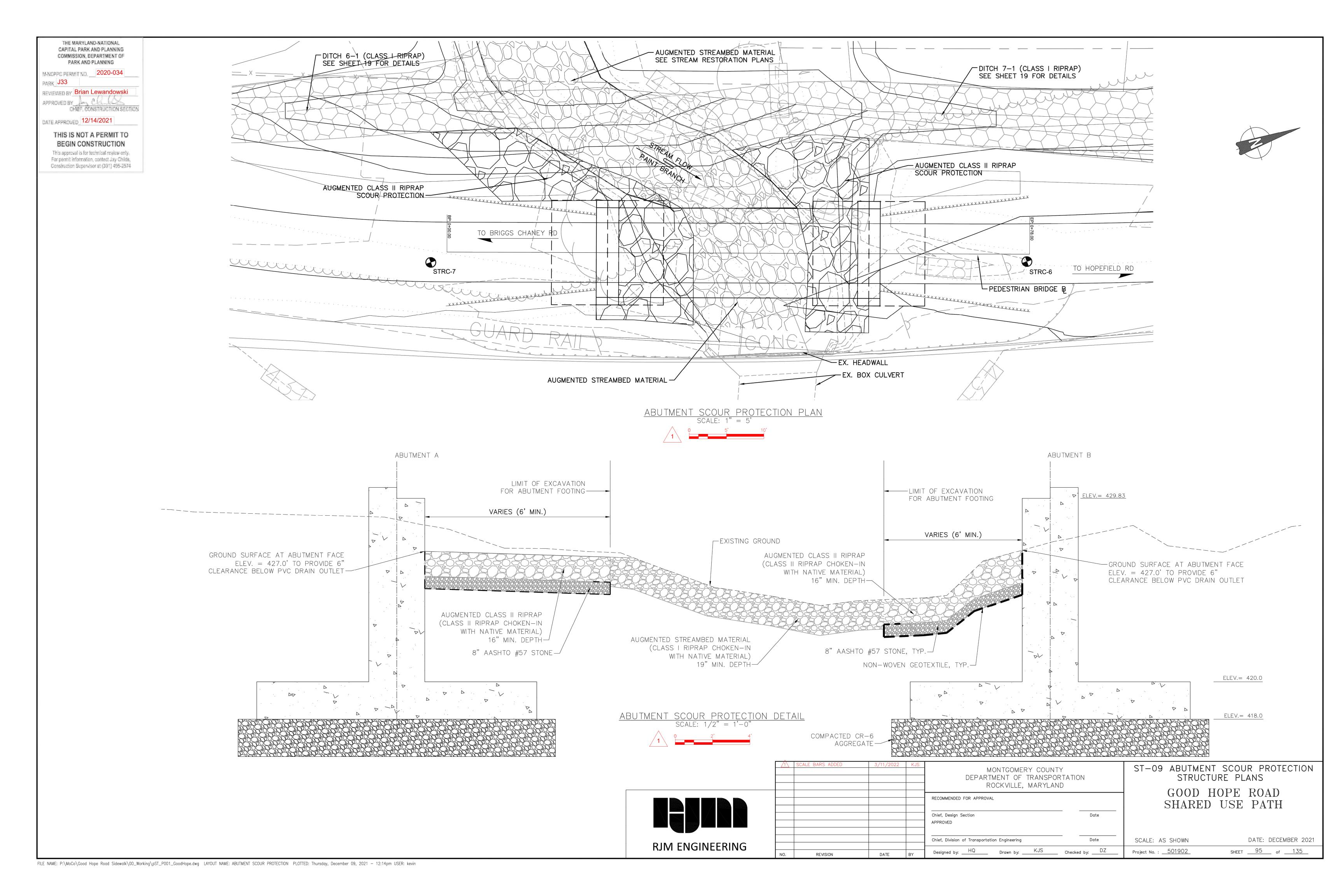
RJM ENGINEERING

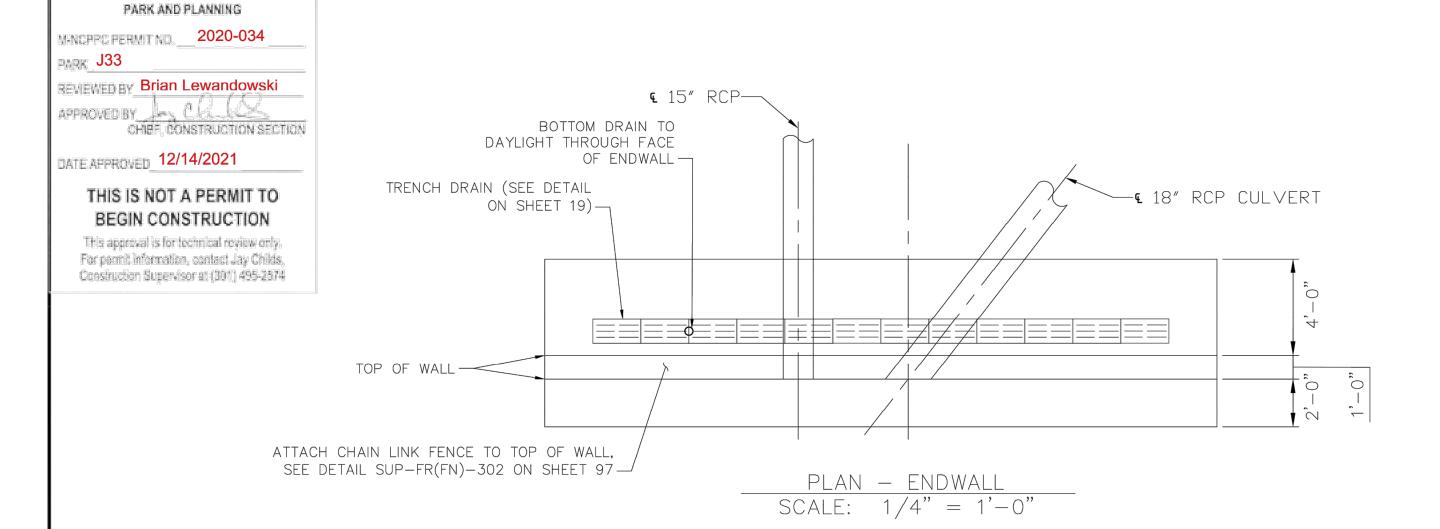
	MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND
	REFER TO TITLE SHEET FOR SIGNATURES
	Chief, Design Section Date  APPROVED
	REFER TO TITLE SHEET FOR SIGNATURES
	Chief Division of Transportation Engineering

Designed by: HQ Drawn by: KJS

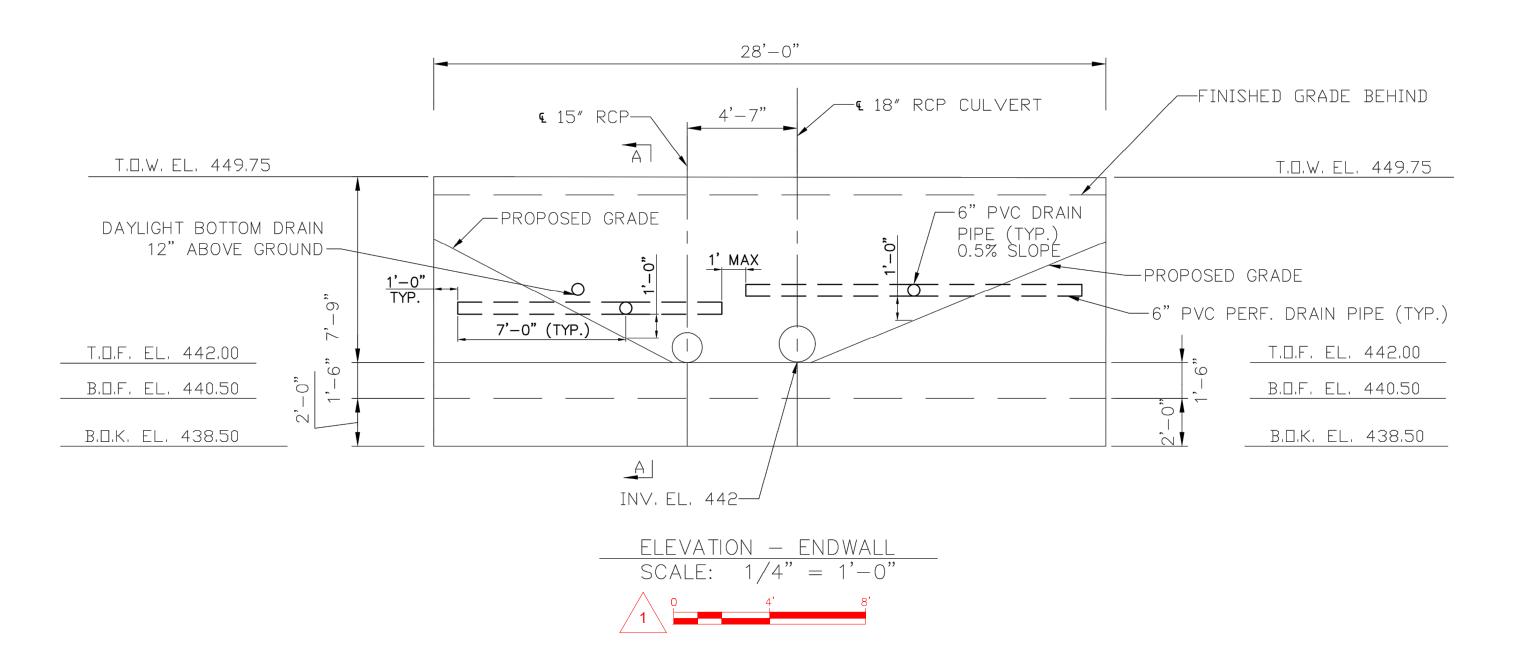
ST-08 SOIL BORINGS STRUCTURE PLANS GOOD HOPE ROAD SHARED USE PATH

DATE: DECEMBER 2021 SHEET <u>94</u> of <u>135</u> Project No. : <u>501902</u>



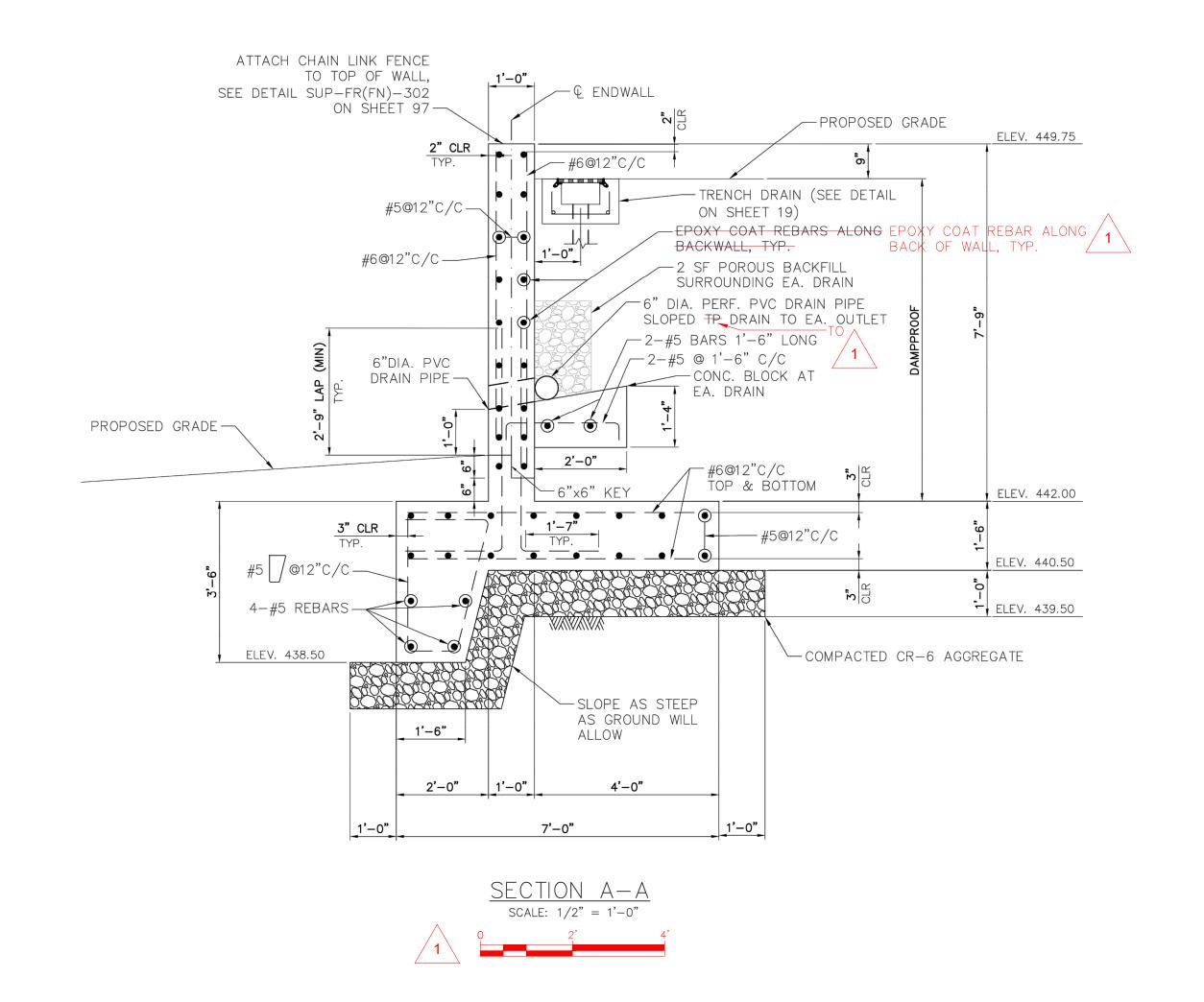


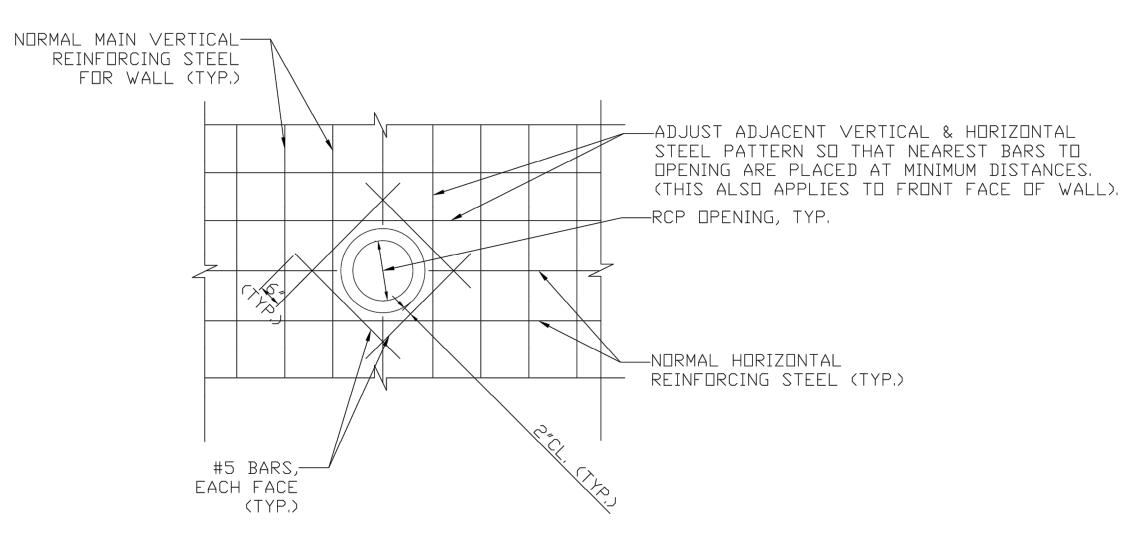
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION, DEPARTMENT OF



#### NOTES:

1. FOR STRUCTURAL GENERAL NOTES, SEE DRAWING ST-01 ON SHEET 87. 2. FOR CHAIN LINK FENCE DETAILS, SEE DRAWING ST-11 ON SHEET 97.





#### NOTES:

DATE

REVISION

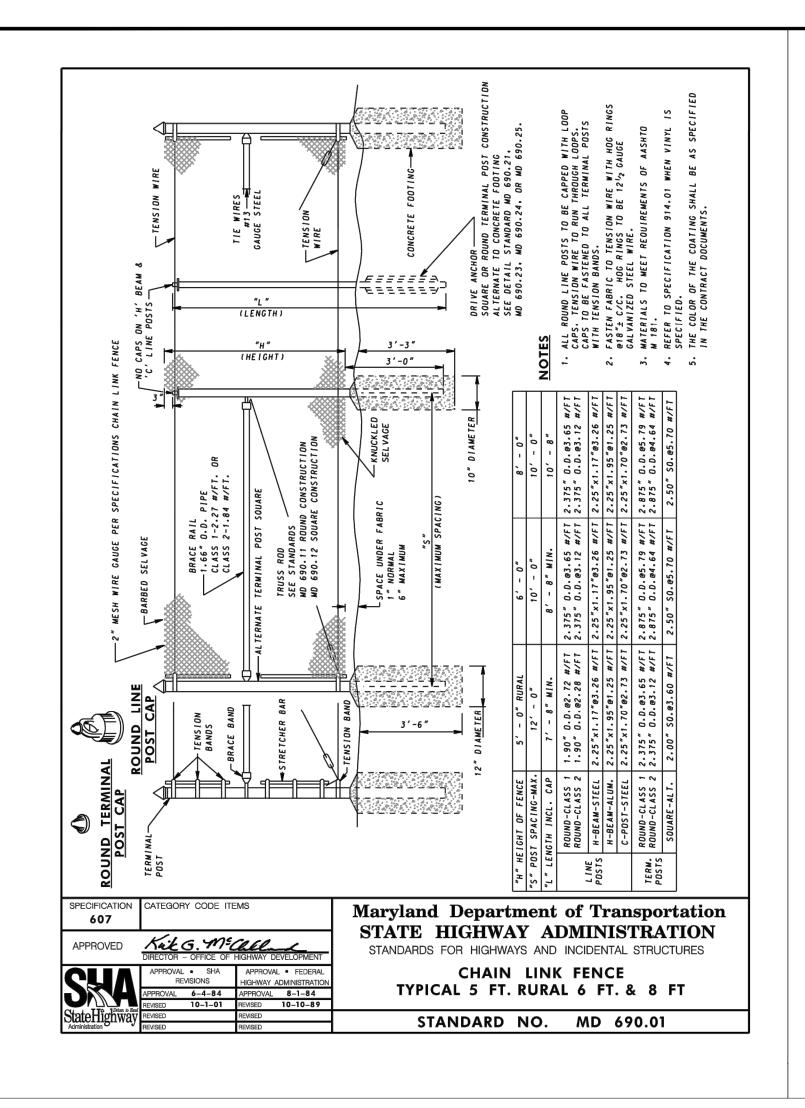
1. IN NO CASE SHALL CONCRETE COVER BE LESS THAN 2".

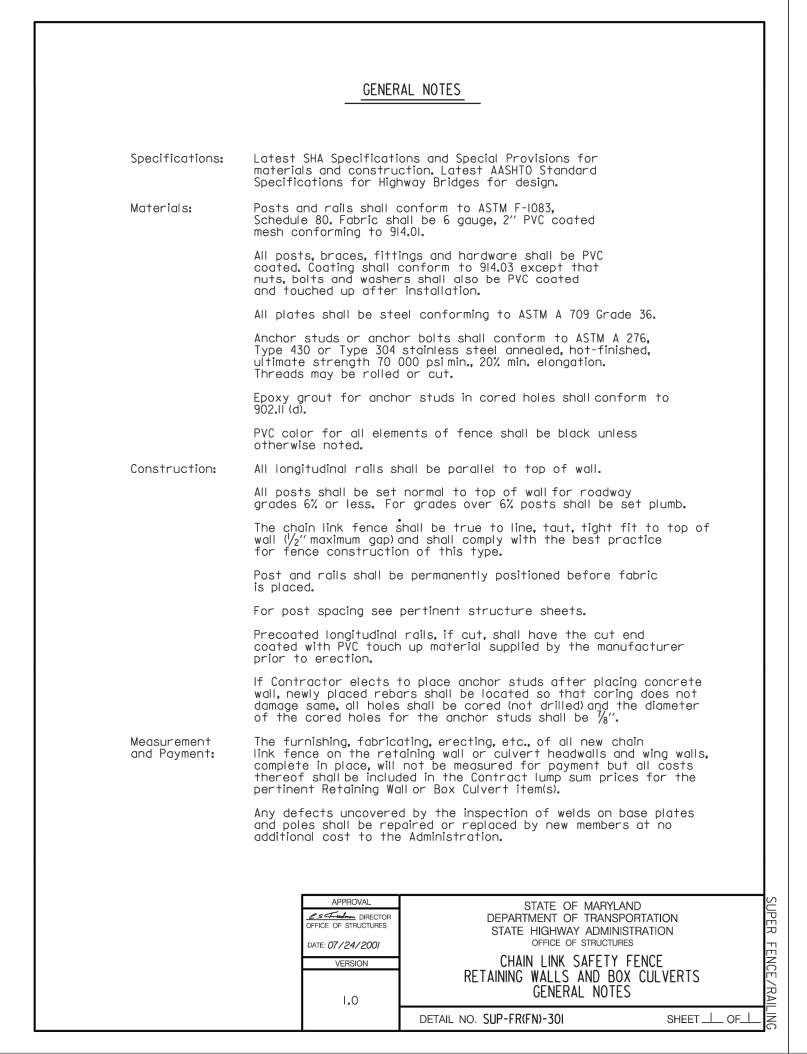
#### PIPE PENETRATION TYPICAL REINFORCING DETAIL SCALE: 1/2" = 1'-0"

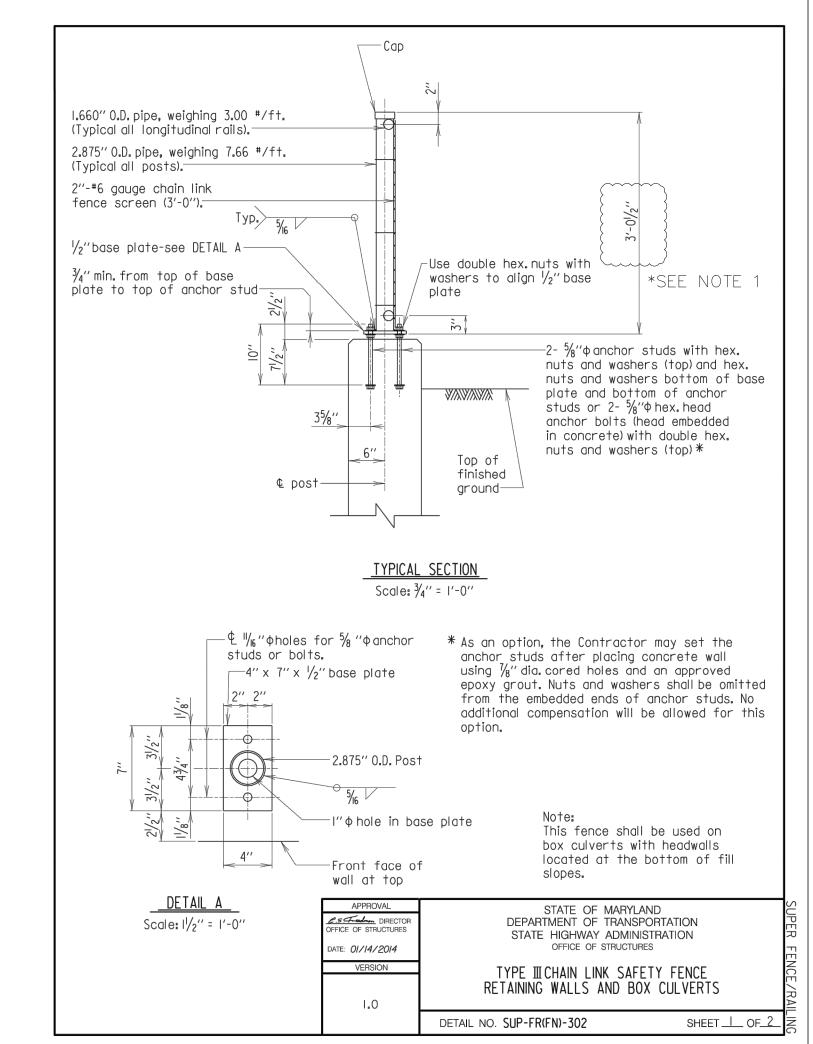
MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND RECOMMENDED FOR APPROVAL Chief, Design Section APPROVED Chief, Division of Transportation Engineering Designed by: HQ Drawn by: KJS Checked by: DZ

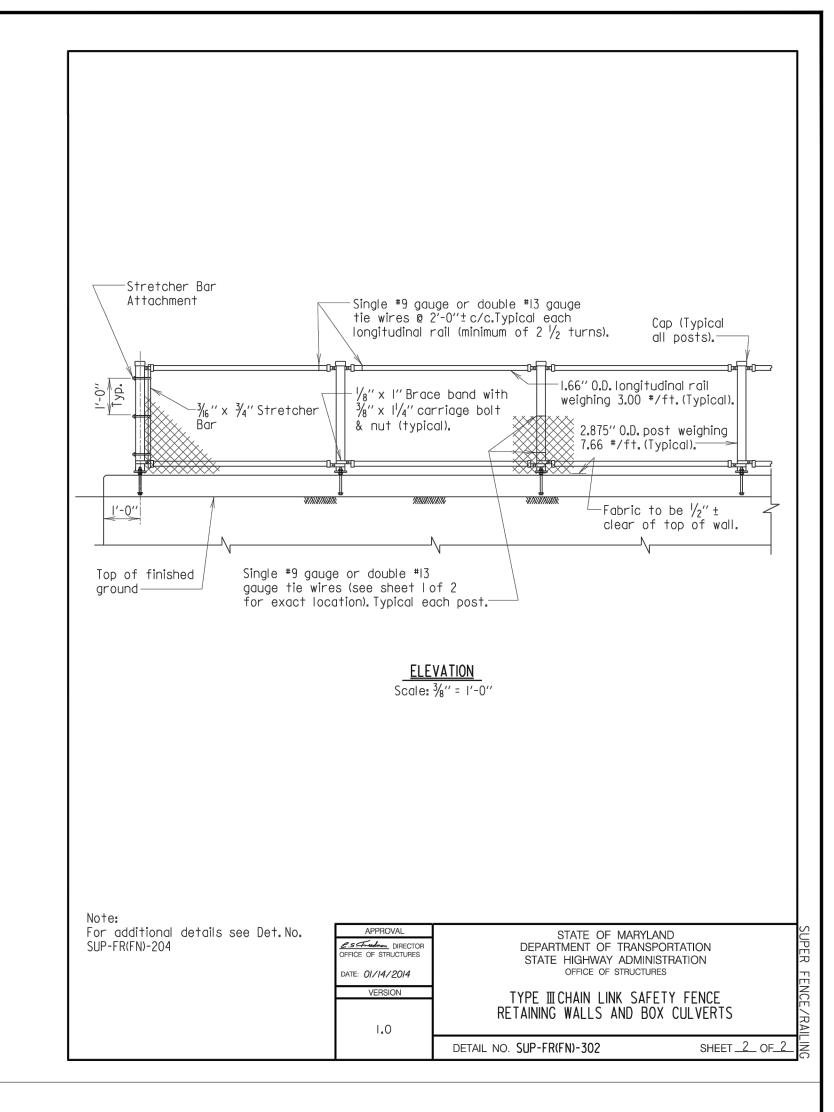
ST-10 ENDWALL DETAILS STRUCTURE PLANS GOOD HOPE ROAD SHARED USE PATH

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT DATE: DECEMBER 2021 SCALE: AS NOTED SHEET <u>96</u> of <u>135</u> Project No. : <u>501902</u>

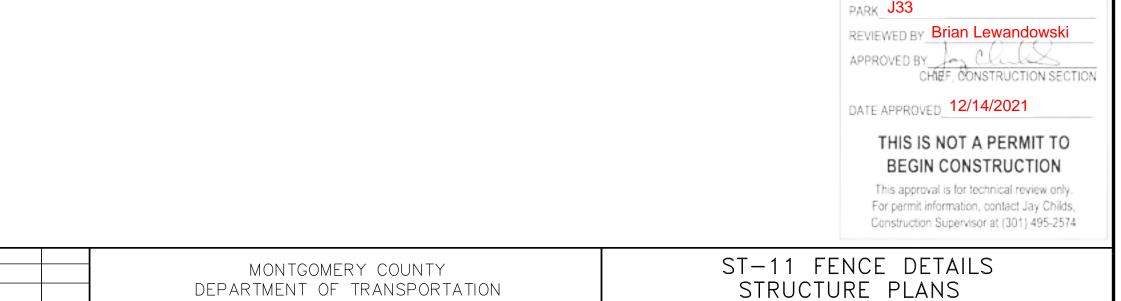


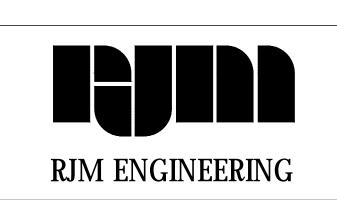






1. FENCE HEIGHT SHALL BE 4'-2" IN ACCORDANCE WITH THE SPECIAL PROVISIONS.





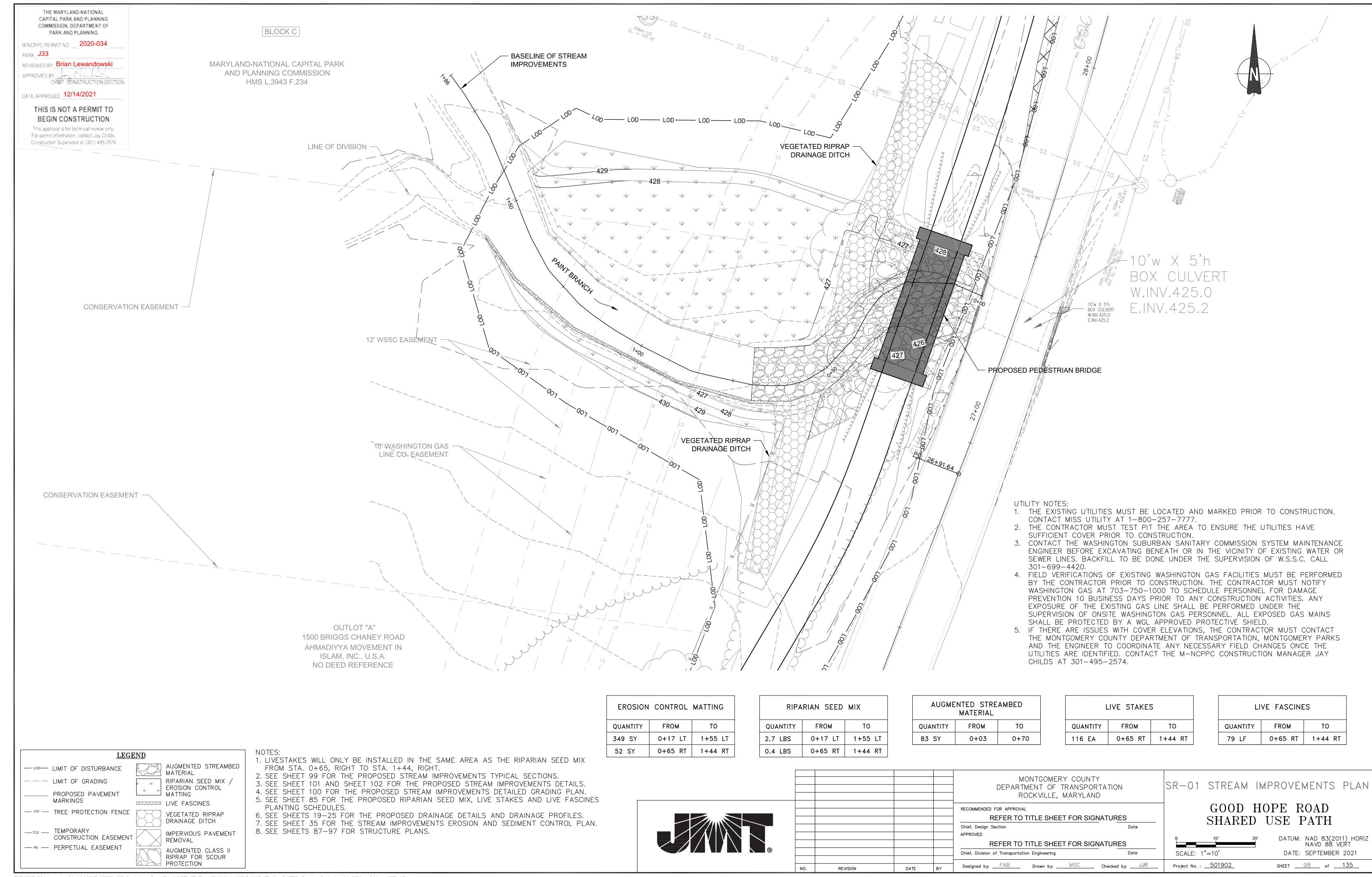
				MONTGOMERY COU DEPARTMENT OF TRANSI			FENCE DETAILS TURE PLANS
				ROCKVILLE, MARYL	LAND	COOD	HOPE ROAD
				REFER TO TITLE SHEET FOR	SIGNATURES		USE PATH
				Chief, Design Section	Date		
				REFER TO TITLE SHEET FOR	SIGNATURES		DATUM: NAD 83(20 NAVD 88
				Chief, Division of Transportation Engineering	Date	SCALE: AS NOTED	DATE: DECEM
NO.	REVISION	DATE	BY	Designed by: HQ Drawn by: KJS	Checked by: DZ	Project No. : <u>501902</u>	SHEET <u>97</u> of _

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT DATE: DECEMBER 2021 SHEET <u>97</u> of <u>135</u>

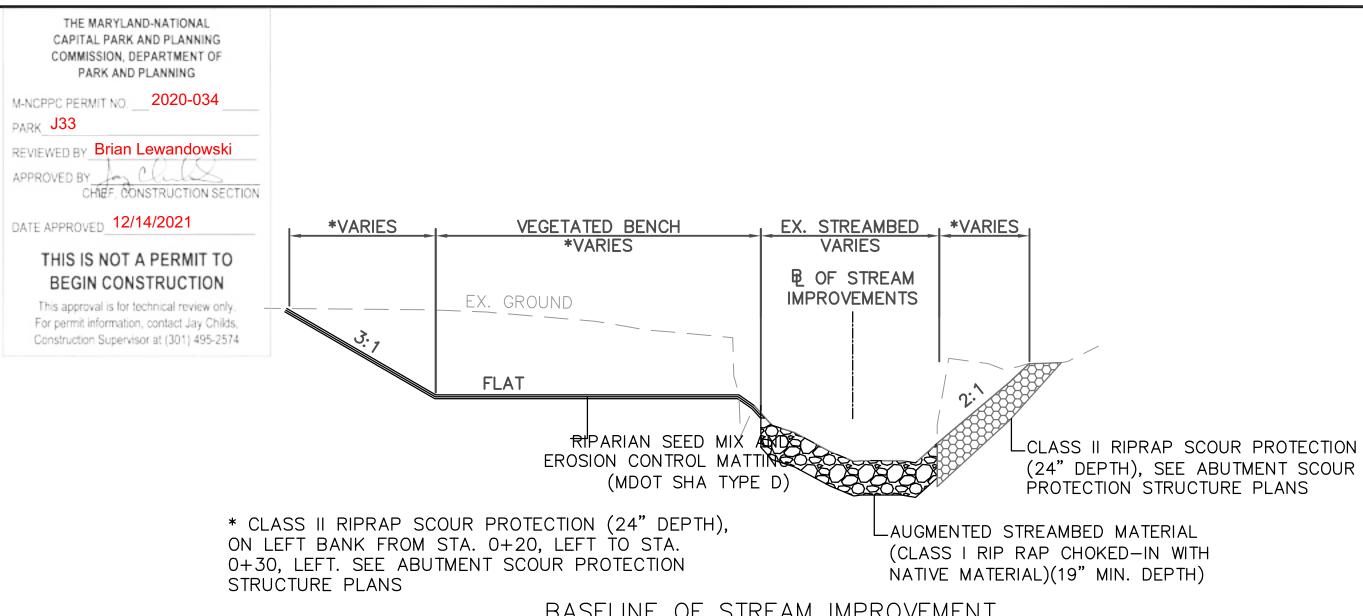
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION, DEPARTMENT OF PARK AND PLANNING

M-NCPPC PERMIT NO. \_\_\_ 2020-034





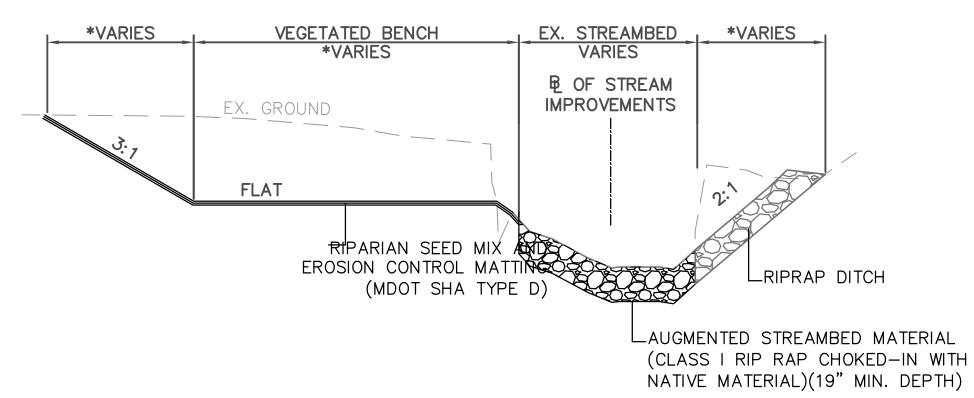




#### BASELINE OF STREAM IMPROVEMENT

STA. 0+03.00 TO STA. 0+54.00

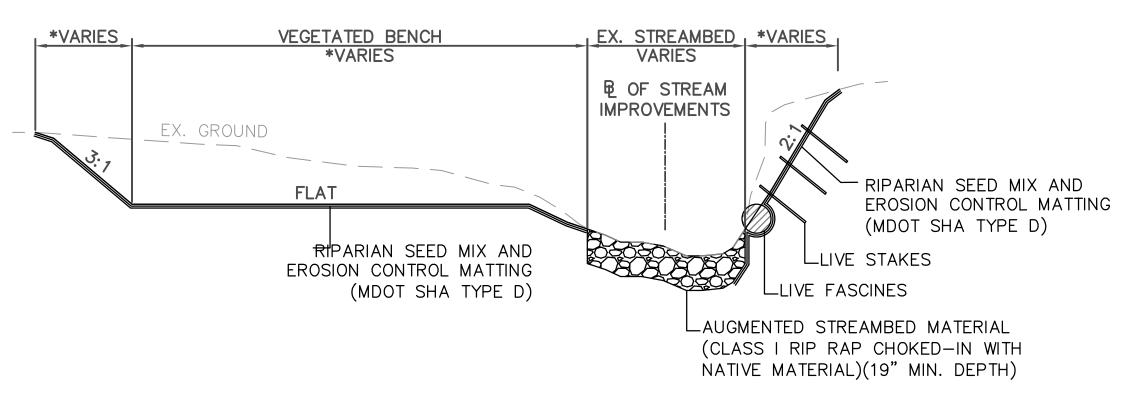
\*SEE DETAILED STREAM IMPROVEMENT GRADING PLAN



BASELINE OF STREAM IMPROVEMENT

STA. 0+54.00 TO STA. 0+65.00

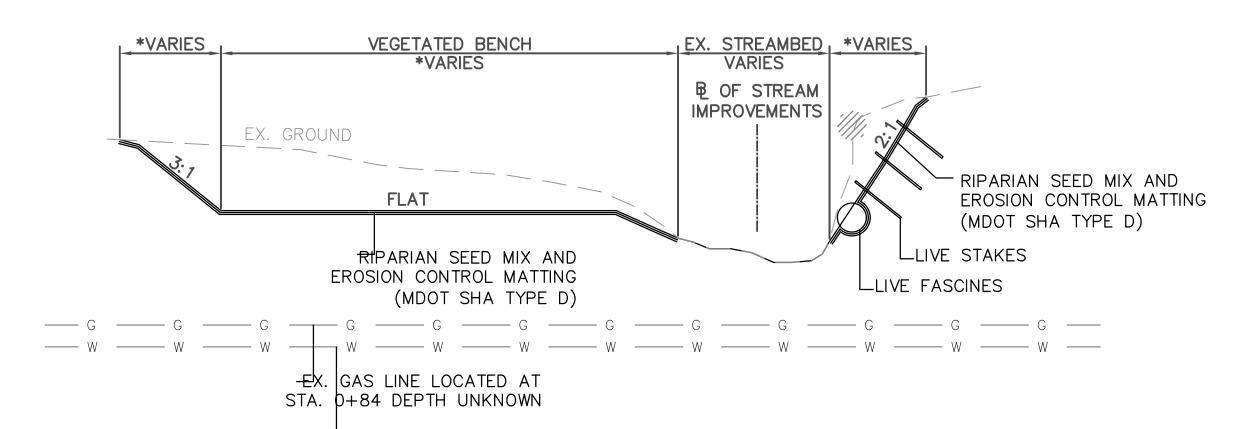
\*SEE DETAILED STREAM IMPROVEMENT GRADING PLAN



#### BASELINE OF STREAM IMPROVEMENT

STA. 0+65.00 TO STA. 0+70.00

\*SEE DETAILED STREAM IMPROVEMENT GRADING PLAN



#### EX. WATER LINE LOCATED AT STA. 0+92 DEPTH UNKNOWN

DATE

REVISION

### BASELINE OF STREAM IMPROVEMENT

STA. 0+70.00 TO STA. 1+45.00

\*SEE DETAILED STREAM IMPROVEMENT GRADING PLAN

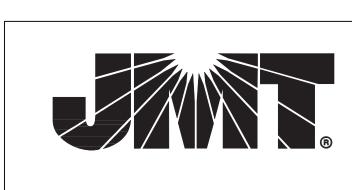
#### UTILITY NOTES:

- 1. THE EXISTING UTILITIES MUST BE LOCATED AND MARKED PRIOR TO CONSTRUCTION. CONTACT MISS UTILITY AT 1-800-257-7777.
- 2. THE CONTRACTOR MUST TEST PIT THE AREA TO ENSURE THE UTILITIES HAVE SUFFICIENT COVER PRIOR TO CONSTRUCTION.
- 3. CONTACT THE WASHINGTON SUBURBAN SANITARY COMMISSION SYSTEM MAINTENANCE ENGINEER BEFORE EXCAVATING BENEATH OR IN THE VICINITY OF EXISTING WATER OR SEWER LINES. BACKFILL TO BE DONE UNDER THE SUPERVISION OF W.S.S.C. CALL 301-699-4420.
- 4. FIELD VERIFICATIONS OF EXISTING WASHINGTON GAS FACILITIES MUST BE PERFORMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR MUST NOTIFY WASHINGTON GAS AT 703-750-1000 TO SCHEDULE PERSONNEL FOR DAMAGE PREVENTION 10 BUSINESS DAYS PRIOR TO ANY CONSTRUCTION ACTIVITIES. ANY EXPOSURE OF THE EXISTING GAS LINE SHALL BE PERFORMED UNDER THE SUPERVISION OF ONSITE WASHINGTON GAS PERSONNEL. ALL EXPOSED GAS MAINS SHALL BE PROTECTED BY A WGL APPROVED PROTECTIVE SHIELD.
- 5. IF THERE ARE ISSUES WITH COVER ELEVATIONS, THE CONTRACTOR MUST CONTACT THE MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION, MONTGOMERY PARKS AND THE ENGINEER TO COORDINATE ANY NECESSARY FIELD CHANGES ONCE THE UTILITIES ARE IDENTIFIED. CONTACT THE M-NCPPC CONSTRUCTION MANAGER JAY CHILDS AT 301-495-2574.

Chief, Division of Transportation Engineering

Drawn by: \_\_\_\_MSC\_\_\_

Checked by: \_\_\_JJR



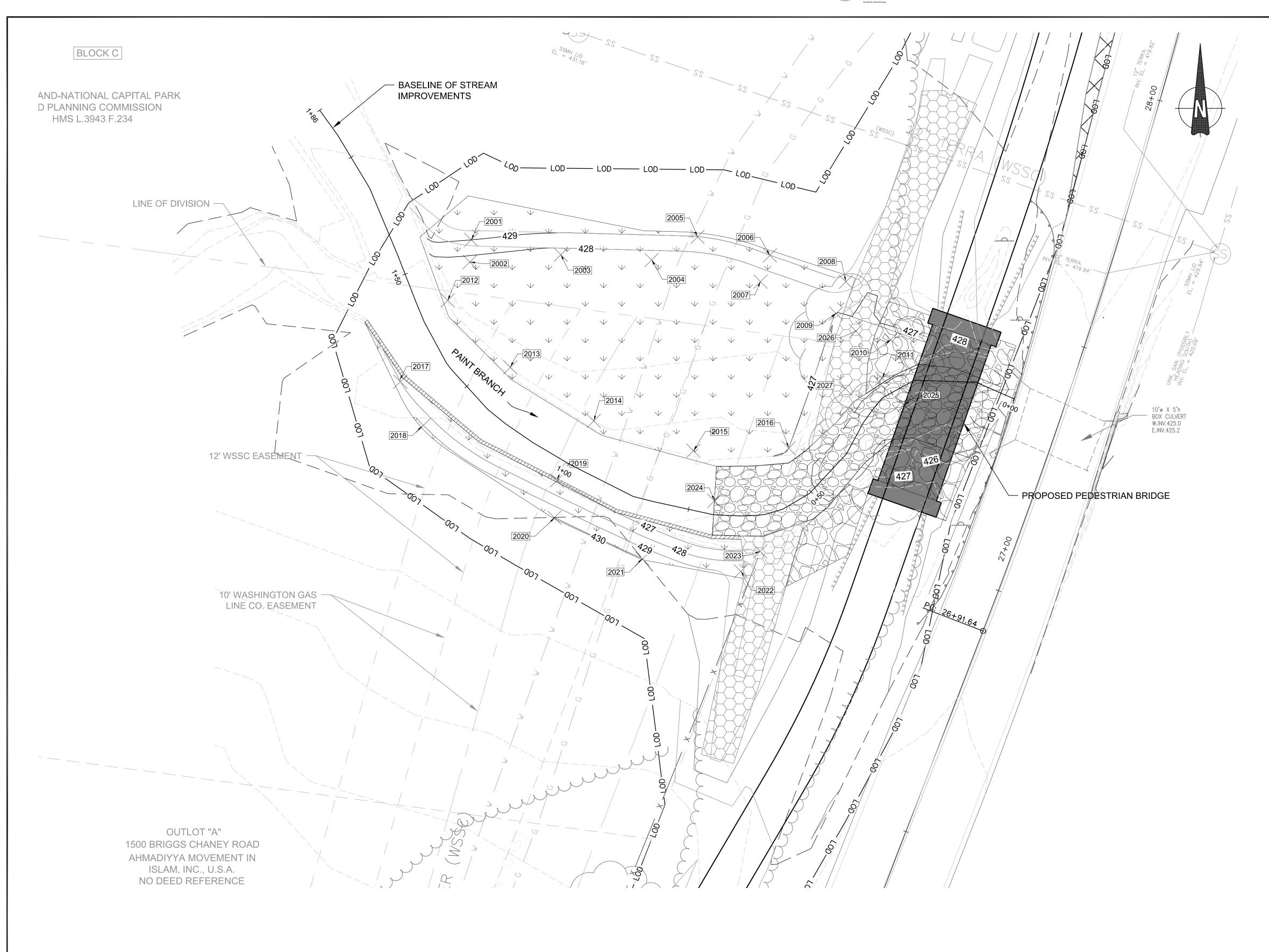
		MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND	
		REFER TO TITLE SHEET FOR SIGNATURES	S
		Chief, Design Section APPROVED	Date
		REFER TO TITLE SHEET FOR SIGNATURES	S

SR-02 STREAM IMPROVEMENTS TYPICAL SECTIONS

> GOOD HOPE ROAD SHARED USE PATH

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT DATE: SEPTEMBER 2021 Project No. : <u>501902</u> SHEET \_\_\_99\_\_\_ of \_\_\_135\_\_





STREAM GRADING POINT TABLE								
POINT	EASTING	NORTHING	ELEVATION	NOTE				
2001	1317754.9047	524121.8958	429.0					
2002	1317754.6142	524117.5902	427.8	TOE OF SLOPE				
2003	1317772.2399	524119.0697	427.6	TOE OF SLOPE				
2004	1317789.8300	524118.0272	427.4	TOE OF SLOPE				
2005	1317798.7267	524122.5136	429.0					
2006	1317812.7349	524118.9333	429.0					
2007	1317810.9220	524113.8475	427.2	TOE OF SLOPE				
2008	1317827.4557	524113.8220	429.0					
2009	1317825.5741	524107.6623	427.0	TOE OF SLOPE				
2010	1317836.1867	524102.5846	426.6	TOE OF SLOPE				
2011	1317834.5028	524095.0583	426.6					
2012	1317750.3294	524110.1554	427.8					
2013	1317762.4415	524097.2538	427.6					
2014	1317778.6250	524086.8332	427.4					
2015	1317797.9637	524081.0576	427.2					
2016	1317816.3938	524081.5918	427.0					
2017	1317741.0308	524094.7135	428.0					
2018	1317745.4143	524085.8527	429.0					
2019	1317771.4829	524075.3618	427.0					
2020	1317771.0727	524068.0744	430.0					
2021	1317788.0334	524060.1638	430.0					
2022	1317807.1341	524057.7275	429.0					
2023	1317810.9114	524061.5507	427.0					
2024	1317802.0027	524071.3421	425.6	AUGMENTED STREAMBED MATERIAL				
2025	1317838.7814	524089.8993	424.1	AUGMENTED STREAMBED MATERIAL				
2026	1317829.4009	524104.2202	426.6	VEGETATED RIPRAP				
2027	1317827.3542	524093.0633	426.6	VEGETATED RIPRAP				

MONTGOMERY COUNTY RECOMMENDED FOR APPROVAL Chief, Design Section APPROVED

DATE

NO.

REVISION

DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND REFER TO TITLE SHEET FOR SIGNATURES REFER TO TITLE SHEET FOR SIGNATURES Chief, Division of Transportation Engineering

Designed by: FAB Drawn by: MSC Checked by: JJR

SR-03 DETAILED STREAM IMPROVEMENTS GRADING PLAN

PARK J33

# GOOD HOPE ROAD SHARED USE PATH

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT DATE: SEPTEMBER 2021 SCALE: 1"=10' Project No. : <u>501902</u> SHEET 100 of 135

THE MARYLAND-NATIONAL

CAPITAL PARK AND PLANNING COMMISSION, DEPARTMENT OF

PARK AND PLANNING

M-NCPPC PERMIT NO. \_\_\_ 2020-034

REVIEWED BY Brian Lewandowski

DATE APPROVED 12/14/2021

APPROVED BY CONSTRUCTION SECTION

THIS IS NOT A PERMIT TO BEGIN CONSTRUCTION This approval is for technical review only. For permit information, contact Jay Childs, Construction Supervisor at (301) 495-2574



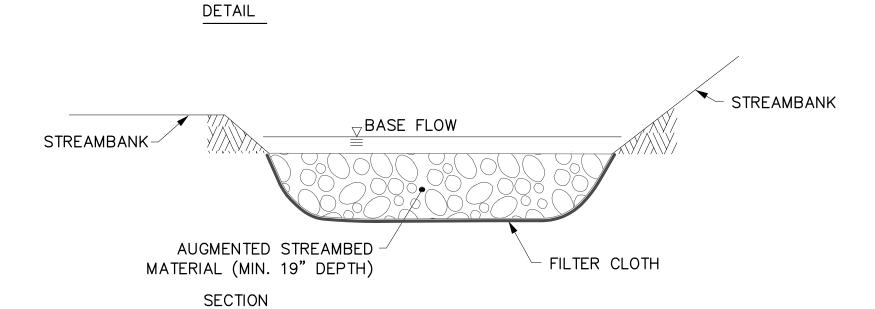


For permit information, contact Jay Childs,

Construction Supervisor at (301) 495-2574

CLASS I RIPRAP

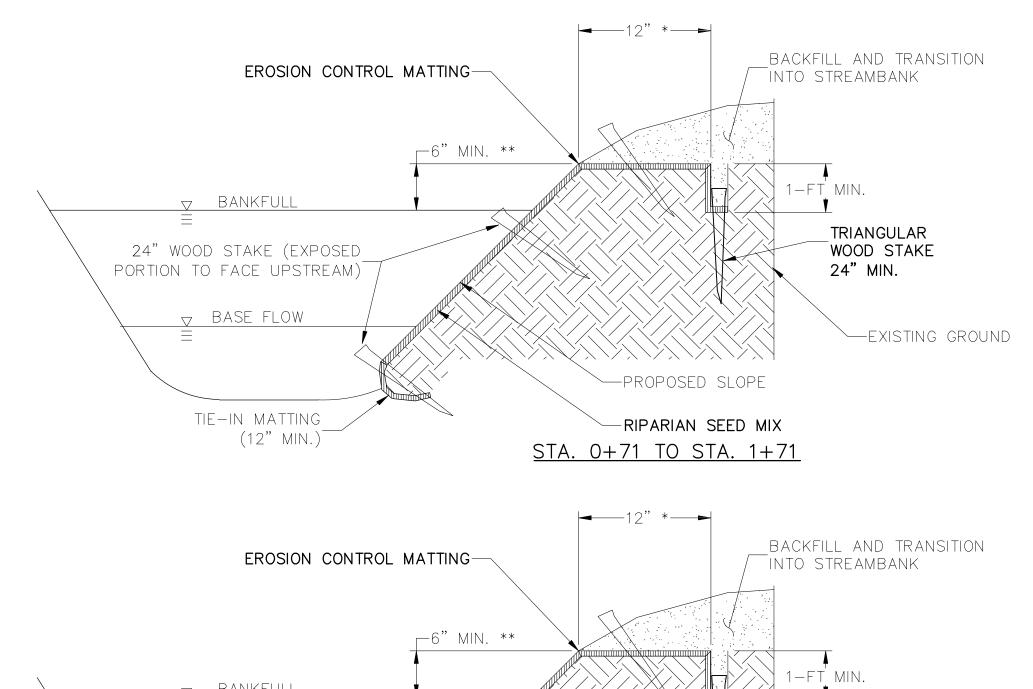
SALVAGED NATIVE STREAMBED MATERIAL

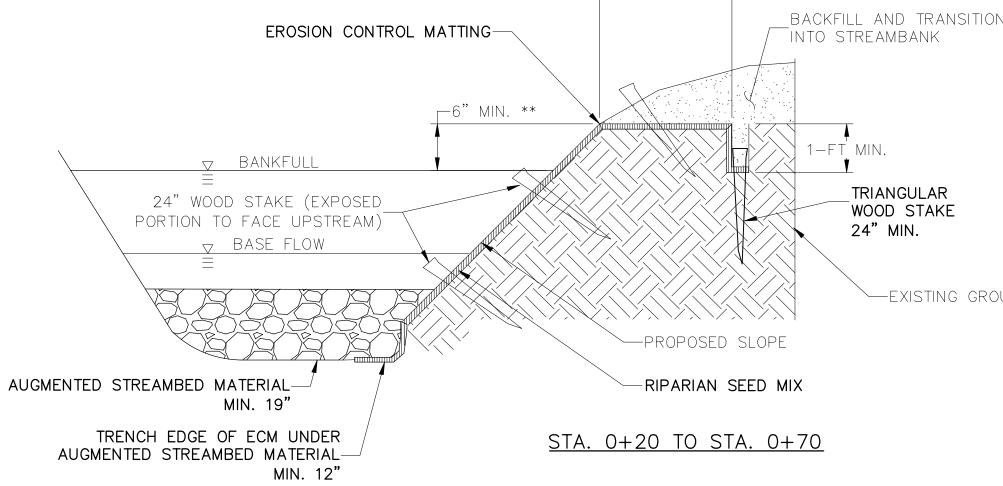


NOTE:

- 1. MIX SHALL CONSIST OF 70% CLASS I RIPRAP AND 30% SALVAGED NATIVE STREAMBED MATERIAL.
- 2. IF THE AMOUNT OF SALVAGED NATIVE STREAMBED MATERIAL ON—SITE IS NOT SUFFICIENT, MDOT SHA BANK RUN GRAVEL MAY BE SUBSTITUTED.
- 3. THE AUGMENTED STREAMBED MATERIAL SHALL BE INSTALLED TO A MINIMUM DEPTH OF 19 INCHES BELOW THE EXISTING STREAMBED ELEVATION.
- 4. THE AUGMENTED STREAMBED MATERIAL SHALL BE ROCK OF NATURAL COLOR (i.e. BROWN, GRAY, TAN). WHITE STONE WILL NOT BE PERMITTED. STONE OF SERPENTINE ORIGIN WILL NOT BE PERMITTED.
- 5. GEOTEXTILE FILTER CLOTH MUST FIRST BE PLACED UNDER THE AREA TO RECEIVE THE AUGMENTED STREAMBED MATERIAL AND TRIMMED FLUSH WITH THE STREAMBED ELEVATION UPON COMPLETION.
- 6. THE AUGMENTED STREAMBED MATERIAL SHALL BE INSTALLED IN 2 LIFTS OF APPROXIMATELY 9.5 INCHES. EACH LIFT SHALL BE COMPACTED AND WASHED SEVERAL TIMES. ERODED MATERIALS SHALL BE REPLACED. THE ENGINEER MUST APPROVE FINAL ACCEPTANCE.
- 7. THE FINISHED INSTALLATION OF THE AUGMENTED STREAMBED MATERIAL SHALL MATCH THE ORIGINAL SLOPE OF THE STREAMBED.
- 8. SEE THE EROSION CONTROL MATTING (ECM) DETAILS FOR SECURING THE ECM WITHIN THE AUGMENTED RIFFLE MATERIAL.

AUGMENTED STREAMBED MATERIAL DETAILS
NO SCALE





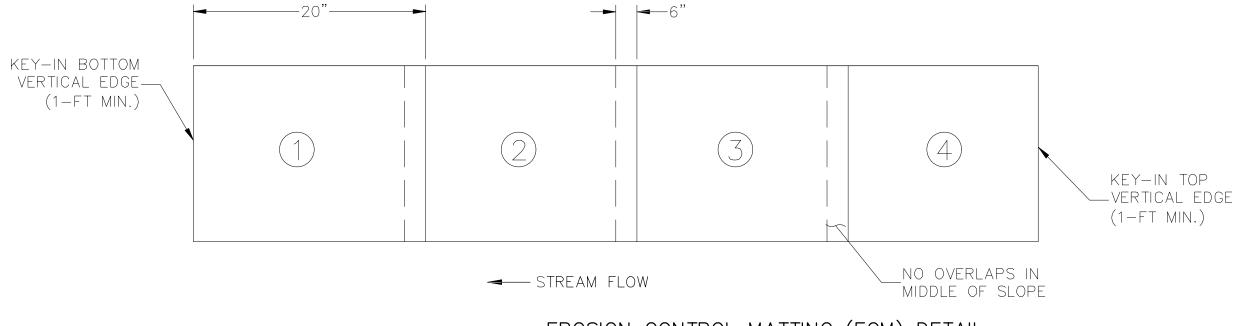
NOTES:

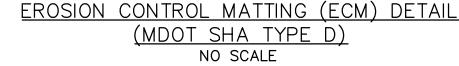
- 1. APPLY AND RAKE IN THE RIPARIAN SEED MIX PRIOR TO THE INSTALLATION OF THE EROSION CONTROL MATTING.
- 2. RIGHT STREAMBANK DETAILS AS SHOWN ABOVE ARE THE
- MIRROR REVERSE OF THE LEFT STREAMBANK.

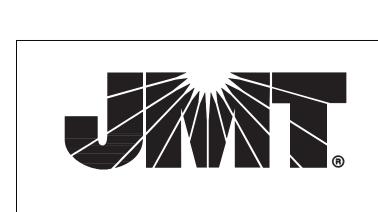
  3. SEE SHEET 65 FOR THE RIPARIAN SEED MIX SPECIFICATIONS.

NOTES

- 1. BEGIN AT THE BOTTOM OF THE SLOPE, WORKING FROM DOWNSTREAM UP, AND ANCHOR FIBER MATTING IN A 12" DEEP INITIAL ANCHOR TRENCH. BACKFILL TRENCH AND TAMP EARTH FIRMLY.
- 2. OVERLAP EDGES OF ADJACENT PARALLEL ROLLS 6" AND ANCHOR AT 12" CENTERS WITH THE UPPER ROLL OVERLAPPING THE TOP OF THE LOWER ROLL.
- 3. WHEN FIBER MAT MUST BE SPLICED, PLACE END OVER END (SHINGLE STYLE IN DIRECTION OF FLOW) WITH 12" OVERLAP AND ANCHOR WITH WOOD STAKES AT 12" CENTERS. ADDITIONAL FASTENING MAY BE REQUIRED WHERE MATTING IS CUT TO INSTALL PLANTINGS.
- 4. LAY FIBER MAT LOOSELY AND ANCHOR SUFFICIENTLY TO MAINTAIN DIRECT CONTACT WITH THE SOIL DO NOT STRETCH.
- 5. FOR SLOPES 2:1 AND STEEPER USE A MINIMUM OF (3) 24—INCH WOOD STAKES PER SQUARE YARD AND FOR SLOPES FLATTER THAN 2:1 USE A MINIMUM OF (2) 24—INCH WOOD STAKES PER SQUARE YARD. PROVIDE ADDITIONAL STAKING ALONG CHANNEL BOTTOM WHERE ECM FORMS TOE OF SLOPE.
- 6. WOOD STAKES SHALL BE ANGLED SUCH THAT EXPOSED PORTION (2"-4") FACES UPSTREAM.
- 7. ANCHOR, FILL, AND COMPACT END OF FIBER MATTING IN 12"x6" TERMINAL ANCHOR TRENCH (MIRROR IMAGE OF INITIAL TRENCH).
- \*8. ANCHORING DIMENSIONS TO BE REDUCED IN AREAS OF NATURAL RESOURCES TO BE PROTECTED.
- —EXISTING GROUND \*\* 9. EROSION CONTROL MATTING MAY BE EXTENDED UP STREAM BANK AS DIRECTED.
  - 10. WOOD STAKES SHALL BE UNTREATED COMMON SPRUCE—PINE—FIR (SPF) DIMENSIONAL LUMBER (2"X4"), WITH A NOMINAL TOP DIMENSION OF 1—1/2 BY 3—1/2", CUT INTO WEDGES A MINIMUM OF 24" LONG AND INSTALLED 24" ON—CENTER.
  - 11. ALL EROSION CONTROL MATTING SHALL BE 100% BIODEGRADABLE. THE USE OF PLASTIC MATERIALS OR PLASTIC FIBERS ARE NOT PERMITTED ON MNCPPC PARK PROPERTY.







MONTGOMERY CO DEPARTMENT OF TRANS ROCKVILLE, MARY	SPORTATION
RECOMMENDED FOR APPROVAL  REFER TO TITLE SHEET FOR	R SIGNATURES
Chief, Design Section APPROVED  REFER TO TITLE SHEET FOR	Date
Chief. Division of Transportation Engineering	Date

Designed by: FAB Drawn by: MSC Checked by: JJR

SR-04 STREAM IMPROVEMENTS
DETAILS 1

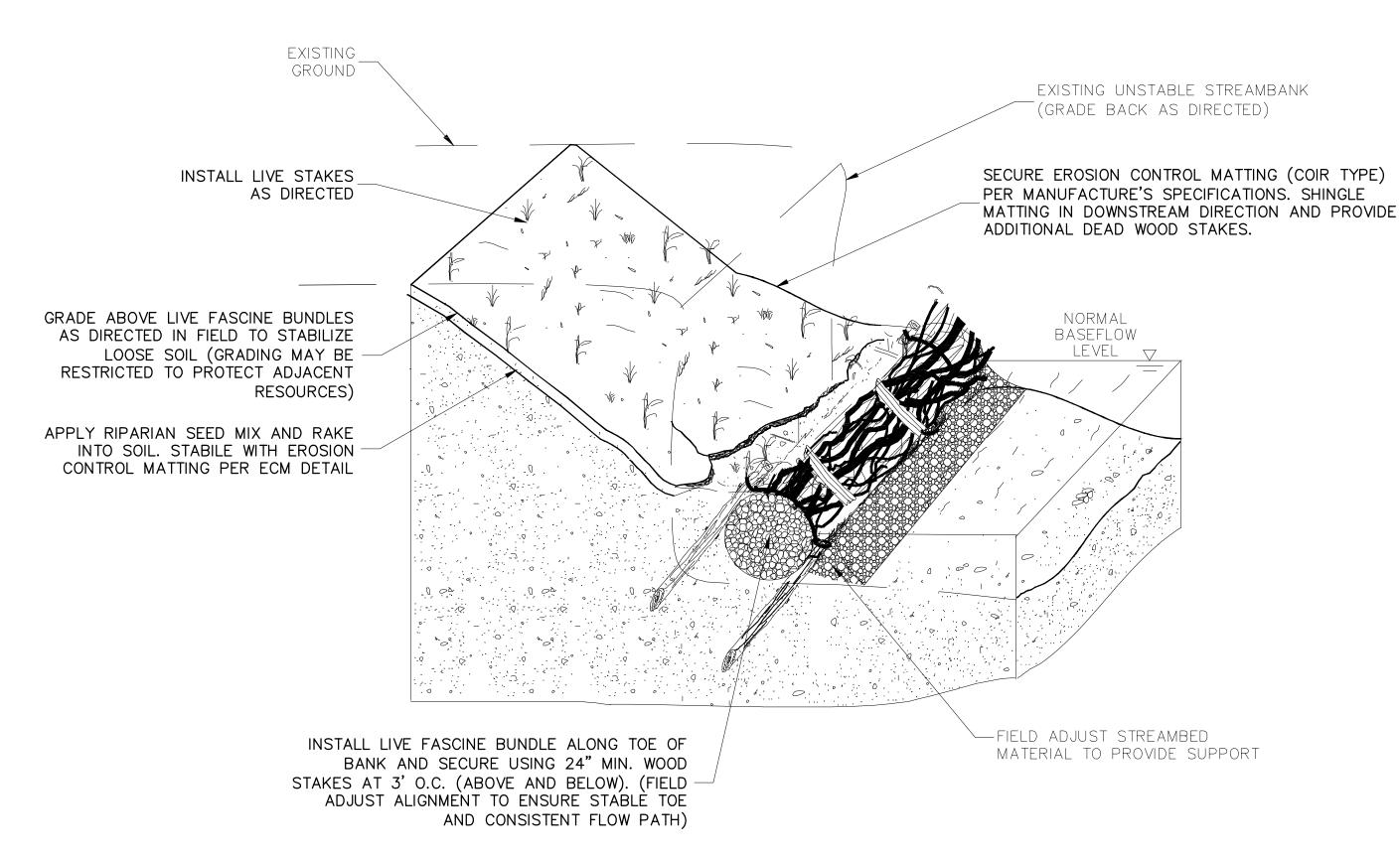
# GOOD HOPE ROAD SHARED USE PATH

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT

SCALE: NOT TO SCALE DATE: SEPTEMBER 2021

Project No.: 501902 SHEET 101 of 135

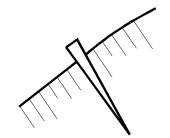


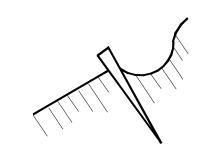


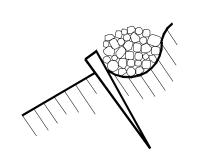


PRELIMINARY STEP - PREPARE FASCINE BUNDLES AS FOLLOWS: CIGAR-SHAPED BUNDLES OF LIVE, ROOTABLE BRUSH AND BRANCHES WITH BUTTS ALTERNATING, 4 TO 10-INCH (10 TO 25-CM) DIAMETERS, TIED 12 TO 18 INCHES (30 TO 45 CM) ON CENTER CONSTRUCTION NOTES: INSTALLATION BEGINS AT THE BOTTOM

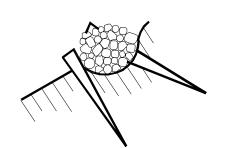
OF THE SLOPE AND PROCEEDS FROM STEP 1 THROUGH STEP 5 ADAPTED FROM LEISER (1983)

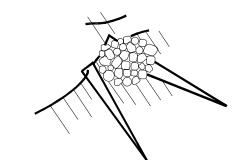






STEP 1: INSERT STAKES ON CONTOUR STEP 2: DIG TRENCH (1/2 BUNDLE STEP 3: PLACE BUNDLES IN TRENCH DIAMETER IN DEPTH) ABOVE THE



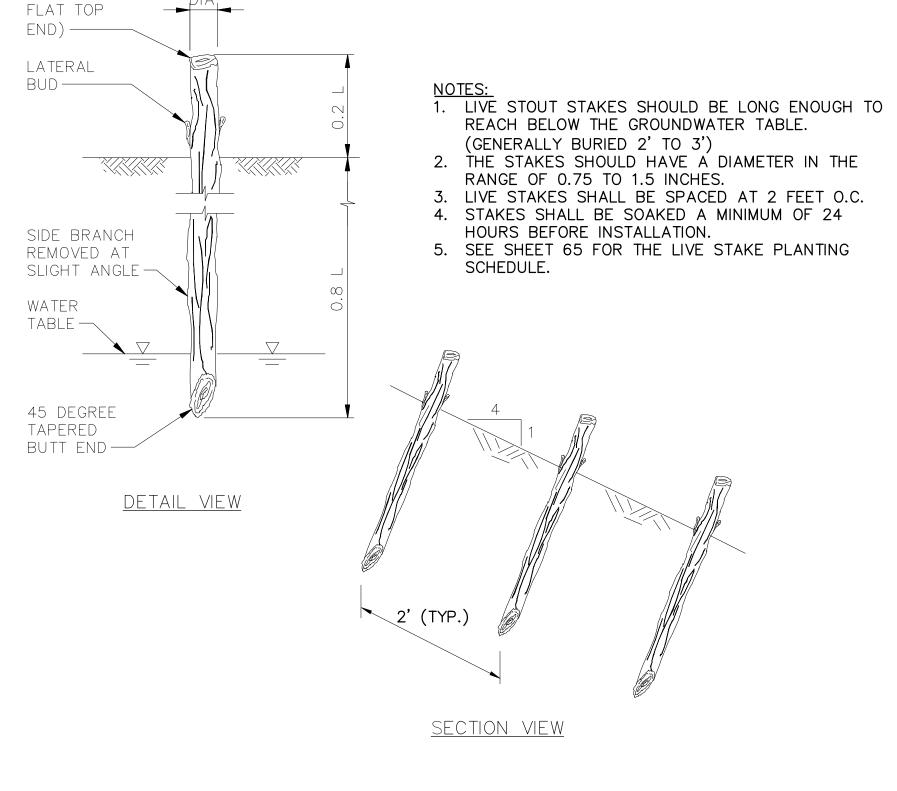


STEP 4: ADD ADDITIONAL STAKES THROUGH AND BELOW BUNDLES

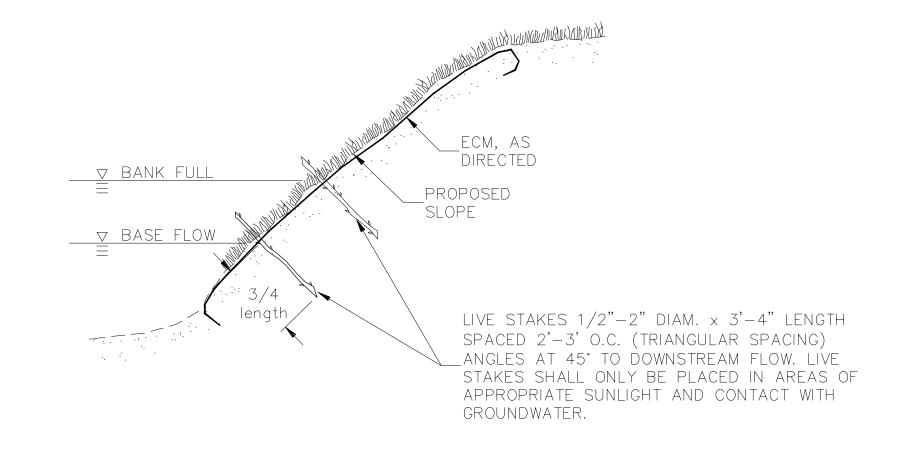
STEP 5: TAMP SOIL INTO AND ALONG SIDES OF BUNDLE LEAVING THE TOP 2 INCHES (5 CM) EXPOSED TO PROMOTE GROWTH

- 1. LIVE FASCINE BUNDLES SHALL BE 6' TO 8' IN LENGTH WITH A DIAMETER OF 4 TO 10 INCHES.
- 2. LIVE FASCINE BUNDLES SHALL CONSIST OF AN EQUAL QUANTITY OF SPECIES. 3. LIVE FASCINES SHALL BE SOAKED A MINIMUM OF 24 HOURS BEFORE INSTALLATION.
- 4. SEE SHEET 65 FOR THE LIVE FASCINE PLANTING SCHEDULE.

LIVE FASCINES DETAIL NO SCALE



LIVE STAKES DETAIL NO SCALE



- SOAK LIVE STAKES FOR 24 HOURS AND RECUT ENDS AT 45° ANGLES PRIOR TO INSTALLATION.
- ●USE 1/2"-3/4" REBAR FOR PILOT HOLES PRIOR TO DRIVING LIVÉ STAKES INTO GROUND.
- DRIVE LIVE STAKE 3/4 OF ITS LENGTH INTO THE GROUND.
- RECUT ANY LIVE STAKE TIPS DAMAGED BY INSTALLATION
- •STAKES TO BE 1/2" TO 1" IN DIAMETER, 3' TO 4' LONG.

LIVE STAKE DETAIL NO SCALE

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION, DEPARTMENT OF PARK AND PLANNING

M-NCPPC PERMIT NO. \_\_\_ 2020-034 PARK J33

REVIEWED BY Brian Lewandowski APPROVED BY CONSTRUCTION SECTION

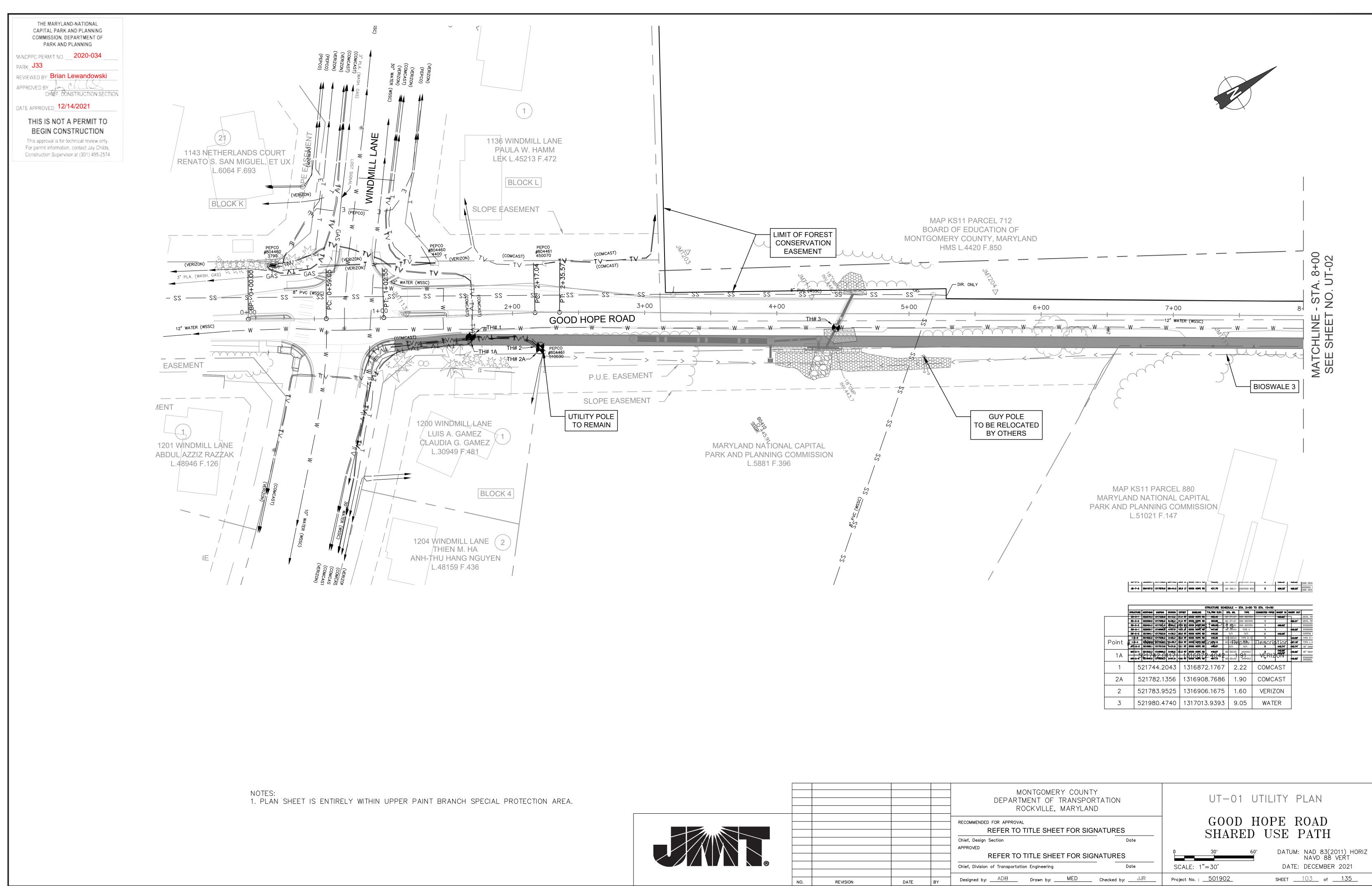
DATE APPROVED 12/14/2021

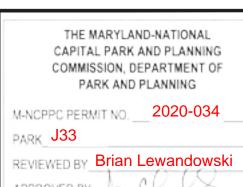
THIS IS NOT A PERMIT TO BEGIN CONSTRUCTION

This approval is for technical review only. For permit information, contact Jay Childs, Construction Supervisor at (301) 495-2574



				MONTGOMERY COUNT DEPARTMENT OF TRANSPOF ROCKVILLE, MARYLAN	RTATION		M IMPROVEMENTS AILS 2
				RECOMMENDED FOR APPROVAL  REFER TO TITLE SHEET FOR SIG	NATUR <u>ES</u>		OPE ROAD USE PATH
_				APPROVED  REFER TO TITLE SHEET FOR SIGI  Chief, Division of Transportation Engineering	NATURES Date	SCALE: NOT TO SCALE	DATUM: NAD 83(2011) HOF NAVD 88 VERT DATE: SEPTEMBER 2021
	NO.	REVISION	DATE BY	Designed by: FAB Drawn by: MSC	Checked by:JJR	Project No. : <u>501902</u>	SHEET <u>102</u> of <u>135</u>





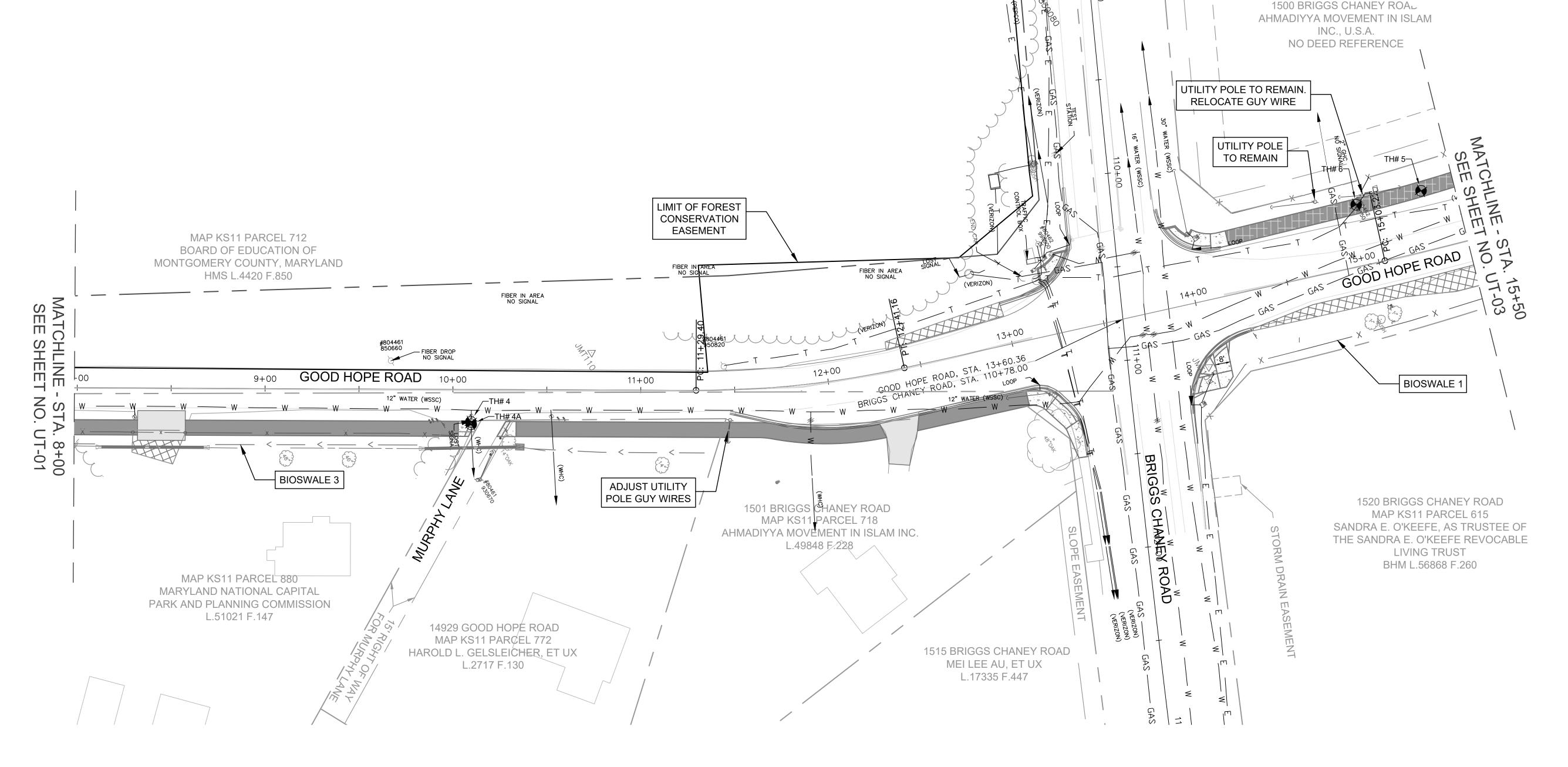
PARK J33

APPROVED BY CONSTRUCTION SECTION

DATE APPROVED 12/14/2021

#### THIS IS NOT A PERMIT TO BEGIN CONSTRUCTION

This approval is for technical review only. For permit information, contact Jay Childs, Construction Supervisor at (301) 495-2574



Utility Test Plts						
Point #	Northing	Easting	Depth	Description		
4A	522452.7366	1317324.2338	0.00	N.U.F.		
4	522453.2524	1317322.9878	1.61	WATER		
5	522946.6220	1317489.0984	2.78	GAS		
6	522913.4567	1317476.9489	5.60	VERIZON		

NOTES: 1. PLAN SHEET IS ENTIRELY WITHIN UPPER PAINT BRANCH SPECIAL PROTECTION AREA.



		MONTGOMERY COUNTY
		DEPARTMENT OF TRANSPORTATION
		ROCKVILLE, MARYLAND
		DECOMMENDED FOR APPROVAL
		RECOMMENDED FOR APPROVAL
		REFER TO TITLE SHEET FOR SIGNATURES

APPROVED

REFER TO TITLE SHEET FOR SIGNATURES Chief, Division of Transportation Engineering

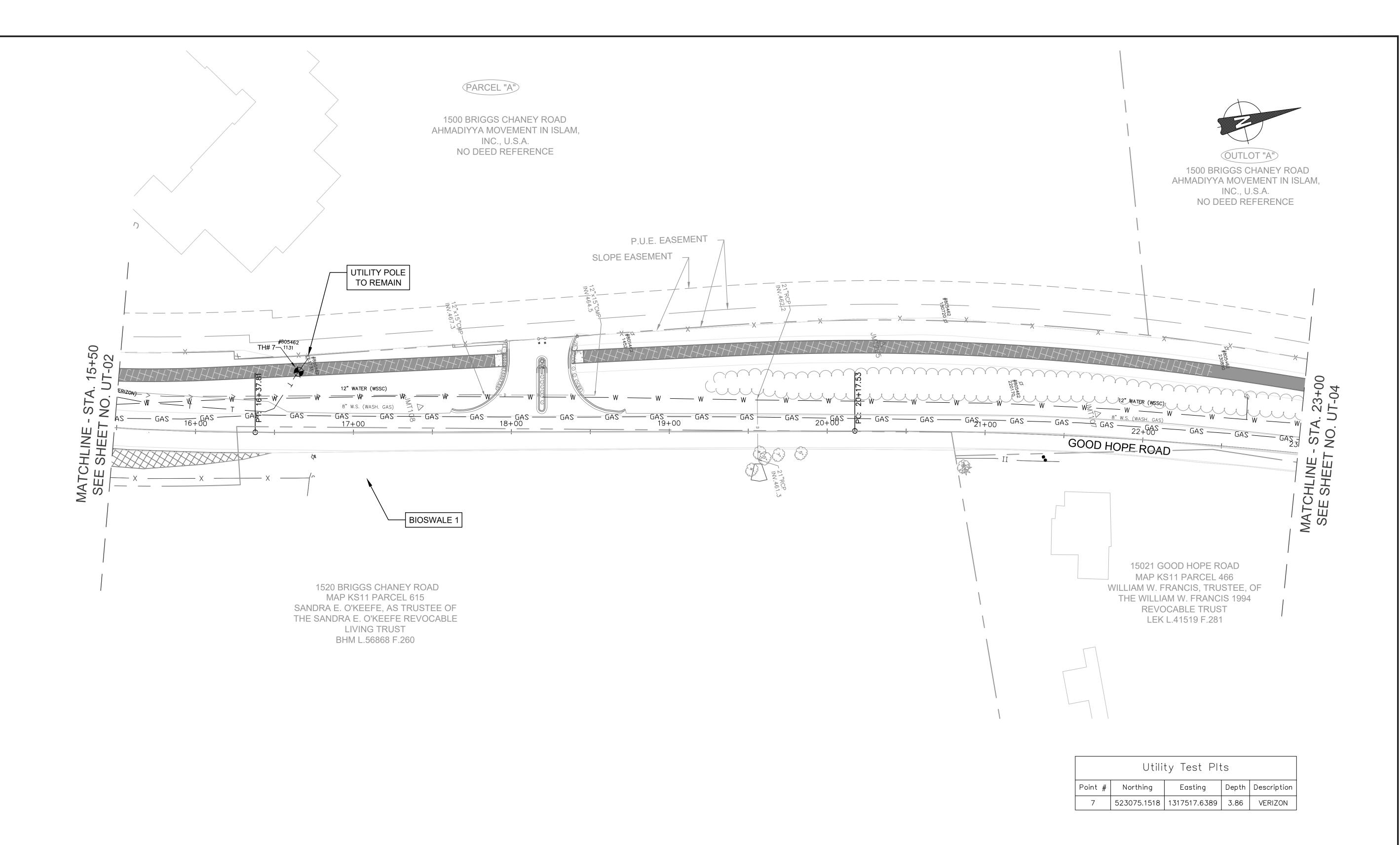
Designed by: ADB Drawn by: MED Checked by: JJR

UT-02 UTILITY PLAN

GOOD HOPE ROAD SHARED USE PATH

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT SCALE: 1"=30' DATE: DECEMBER 2021 SHEET \_\_\_\_104\_\_\_ of \_\_\_135\_\_\_ Project No. : <u>501902</u>





NOTES: 1. PLAN SHEET IS ENTIRELY WITHIN UPPER PAINT BRANCH SPECIAL PROTECTION AREA.



		MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND
		RECOMMENDED FOR APPROVAL
		DEEED TO TITLE QUEET FOR OLOMATUREO

REFER TO TITLE SHEET FOR SIGNATURES

Chief, Design Section Date

APPROVED

REFER TO TITLE SHEET FOR SIGNATURES

Chief, Division of Transportation Engineering

Date

Designed by: <u>ADH</u> Drawn by: <u>MED</u> Checked by: <u>JJR</u>

UT-03 UTILITY PLAN

GOOD HOPE ROAD SHARED USE PATH

SCALE: 1"=30'

Project No. : \_\_501902\_

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT DATE: DECEMBER 2021 SHEET 105 of 135

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION, DEPARTMENT OF PARK AND PLANNING

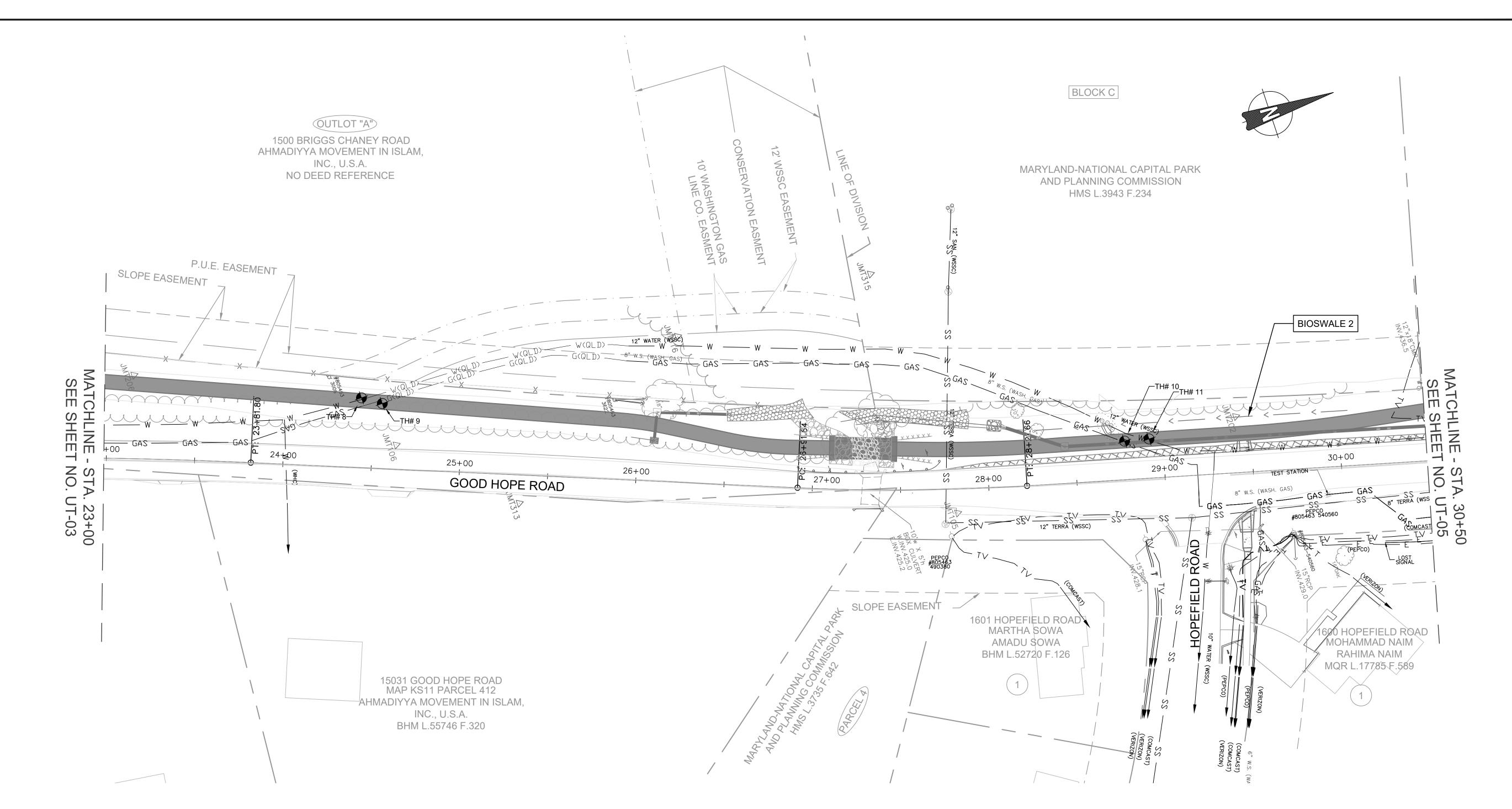
M-NCPPC PERMIT NO. 2020-034

PARK J33 REVIEWED BY Brian Lewandowski APPROVED BY CONSTRUCTION SECTION

DATE APPROVED 12/14/2021

### THIS IS NOT A PERMIT TO

BEGIN CONSTRUCTION This approval is for technical review only. For permit information, contact Jay Childs, Construction Supervisor at (301) 495-2574



	Utility Test Plts						
Point #	Northing	Easting	Depth	Description			
8	523827.8828	1317727.9114	7.55	WATER			
9	523838.0704	1317734.6874	2.64	GAS			
10	524230.1224	1317887.3892	3.24	GAS			
11	524243.6466	1317890.5691	4.43	WATER			

1. PLAN SHEET IS ENTIRELY WITHIN UPPER PAINT BRANCH SPECIAL PROTECTION AREA. 2. PEDESTRIAN BRIDGE INSTALLATION WORK MUST REMAIN MINIMUM 10 FEET FROM ANY

LIVE OVERHEAD WIRES. COORDINATION WITH PEPCO MAY BE REQUIRED FOR A PLANNED OUTAGE DURING THE PEDESTRIAN BRIDGE INSTALLATION. OUTAGES WILL ONLY BE PERMITTED IN SPRING OR FALL.

<b>B</b>
----------

		MONTGOMERY COUNTY
		DEPARTMENT OF TRANSPORTATION
		ROCKVILLE, MARYLAND
		1100111222, 111711112
		DECOMMENDED FOR ADDROVAL
		RECOMMENDED FOR APPROVAL

REFER TO TITLE SHEET FOR SIGNATURES Chief, Design Section APPROVED

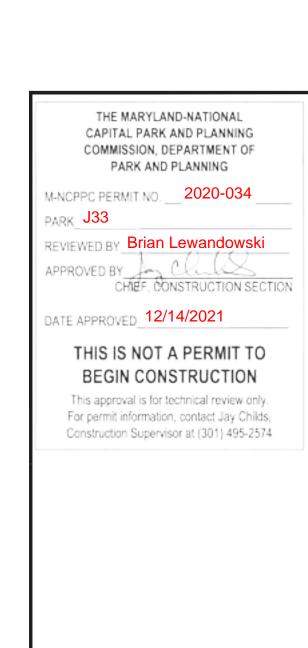
REFER TO TITLE SHEET FOR SIGNATURES Chief, Division of Transportation Engineering

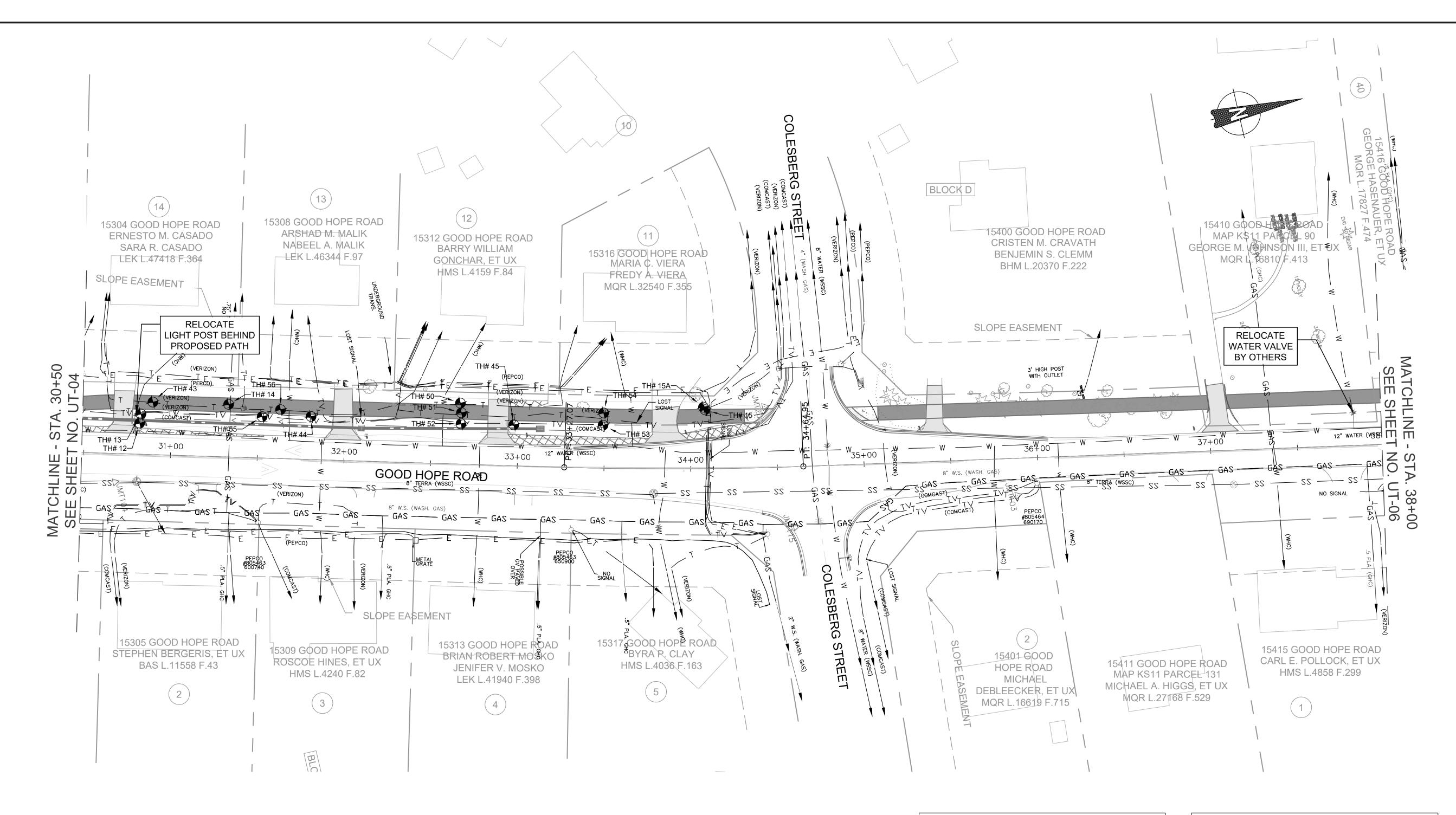
Designed by: ADB Drawn by: MED Checked by: JJR

UT-04 UTILITY PLAN

GOOD HOPE ROAD SHARED USE PATH

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT SCALE: 1"=30' DATE: DECEMBER 2021 SHEET <u>106</u> of <u>135</u> Project No. : <u>501902</u>





Utility Test Plts									
Point # Northing		Easting	Depth	Description					
12	524425.7476	1317943.0805	4.54	WATER					
13	524427.6393	1317938.1361	1.18	COMCAST					
14	524478.1435	1317944.0879	4.00	GAS					
15A	524744.4272	1318007.3959	2.04	VERIZON					
15	524744.9798	1318009.0265	2.83	PEPCO					
43	524435.8785	1317932.9776	0.67	VERIZON					
44	524522.8687	1317961.6192	0.40	VERIZON					
45	524635.6087	1317992.7033	1.60	COMCAST					

Utility Test Plts				
Point #	Northing	Easting	Depth	Description
50	524608.4626	1317973.5382	0.00	N.U.F.
51	524607.7848	1317979.0883	2.65	VERIZON
52	524606.1095	1317985.2405	1.59	COMCAST
53	524685.7151	1318004.4751	1.50	COMCAST
54	524687.6414	1317997.7044	1.96	VERIZON
55	524495.3650	1317955.3764	1.38	COMCAST
56	524506.5939	1317953.8307	1.01	VERIZON

NOTES: 1. PLAN SHEET IS ENTIRELY WITHIN UPPER PAINT BRANCH SPECIAL PROTECTION AREA.



MONTGOMER	RY COUNTY
DEPARTMENT OF	( ) ( ) ( ) ( ) ( )
ROCKVILLE,	

RECOMMENDED FOR APPROVAL
REFER TO TITLE SHEET FOR SIGNATURES

Chief, Design Section Date

APPROVED

REFER TO TITLE SHEET FOR SIGNATURES

Chief, Division of Transportation Engineering

Date

Designed by: ADB Drawn by: MED Checked by: JJR

GOOD HOPE ROAD SHARED USE PATH

30' 60' DATUM: NAD 83(2

UT-05 UTILITY PLAN

DATUM: NAD 83(2011) HORIZ NAVD 88 VERT

SCALE: 1"=30'

Project No.: 501902

SHEET 107 of 135

